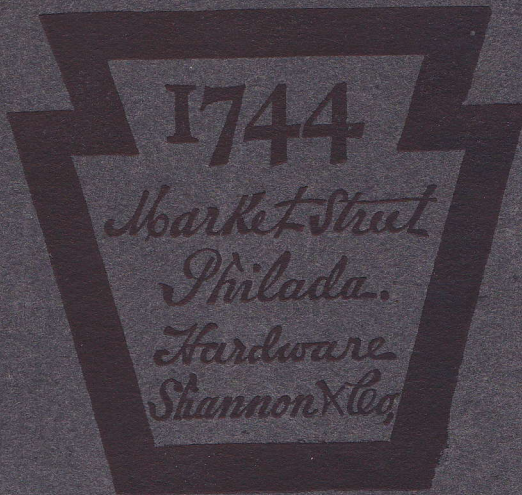


No. 16

CARPENTERS' AND MECHANICS'

TOOLS



BUILDERS' HARDWARE
AND
CONTRACTORS' SUPPLIES

J. JACOB SHANNON & Co.

1744 MARKET STREET

PHILADELPHIA, PA.

CARPENTERS' AND MECHANICS' TOOLS



ALSO DEALERS IN

Builders' Hardware, Pocket and Table Cutlery,
Carvers, Scissors, Razors, Everything
for the Dog, Roller Skates,
Tool Chests, Etc.

Supplies for Contractors, Railroads, Mines, Mills, Etc.

BESIDES THE TOOLS ILLUSTRATED WE HAVE
MANY OTHER STYLES.

All goods ordered from us by mail or telephone will be carefully selected, as we make a special endeavor to see that they are filled promptly.

Everything quoted in our catalogue is the very best quality. All prices are subject to market change without notice.

WHEN ORDERING ALWAYS SPECIFY IF GOODS ARE TO BE
SHIPPED BY FREIGHT OR EXPRESS

ALL PRICES ARE F. O. B. PHILADELPHIA

J. JACOB SHANNON & CO.
1744 Market St. PHILADELPHIA, PA.

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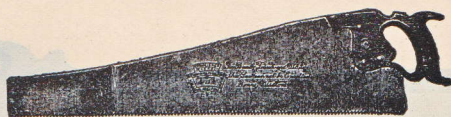
DISSTONS' HAND SAW.

Warranted Spring Steel.



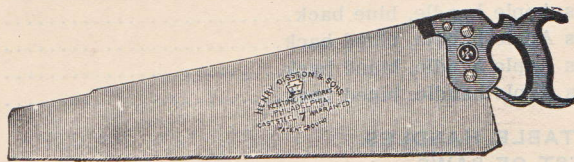
	Each.
No. 16. 14-inch Carved Apple handle, grained blade.....	\$0.90
No. 16. 16-inch Carved Apple handle, grained blade.....	1.00
No. 16. 18-inch Carved Apple handle, grained blade.....	1.10
No. 16. 20-inch Carved Apple handle, grained blade.....	1.30
No. 16. 22-inch Carved Apple handle, grained blade.....	1.45
No. 16. 24-inch Carved Apple handle, grained blade.....	1.55
No. 16. 26-inch Carved Apple handle, grained blade.....	1.65
No. 16. 28-inch Carved Apple handle, grained blade, rip.....	1.85

SKEW BACK.



	Each.
No. D 8. 22-inch Apple handle, spring steel.....	\$1.45
No. D 8. 24-inch Apple handle, spring steel.....	1.55
No. D 8. 26-inch Apple handle, spring steel.....	1.65
No. D 8. 28-inch Apple handle, spring steel, rip.....	1.85

Warranted Cast Steel.



	Each.
No. 7. 14-inch Beech handle, cast steel grained blade.....	\$0.85
No. 7. 16-inch Beech handle, cast steel grained blade.....	.90
No. 7. 18-inch Beech handle, cast steel grained blade.....	.95
No. 7. 20-inch Beech handle, cast steel grained blade.....	1.10
No. 7. 22-inch Beech handle, cast steel grained blade.....	1.20
No. 7. 24-inch Beech handle, cast steel grained blade.....	1.30
No. 7. 26-inch Beech handle, cast steel grained blade.....	1.35
No. 7. 28-inch Beech handle, cast steel grained blade, rip.....	1.55

THE "KEYSTONE SAW."

	Each.
26-inch, 7 to 10 teeth.....	\$1.00



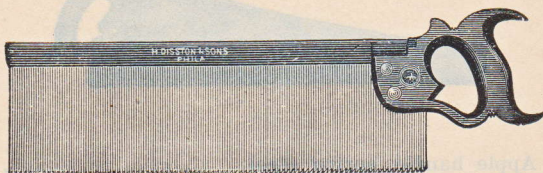
CAST STEEL PANEL SAWS.

Beech Handle, Grained Blade.



	Each.
No. 3. 14-inch Brown's Beech handle, grained blade.....	\$0.50
No. 3. 16-inch Brown's Beech handle, grained blade.....	.60
No. 3. 18-inch Brown's Beech handle, grained blade.....	.65
No. 3. 20-inch Brown's Beech handle, grained blade.....	.75
No. 3. 22-inch Brown's Beech handle, grained blade.....	.80
No. 3. 24-inch Brown's Beech handle, grained blade.....	.90
No. 8. 26-inch Disston's Apple handle, spring steel.....	1.50
No. 8. 28-inch Disston's Apple handle, spring steel, rip.....	1.70

BACK SAWS.



No. 4. Apple Handle, Blued Back.

	Each.
8-inch Disston's Apple handle, blued back.....	\$0.90
10-inch Disston's Apple handle, blued back.....	1.00
12-inch Disston's Apple handle, blue back.....	1.10
14-inch Disston's Apple handle, blued back.....	1.25
16-inch Disston's Apple handle, blued back.....	1.40
18-inch Disston's Apple handle, blued back.....	1.55

ADJUSTABLE HANDLES.

NEST OF SAWS.



The Nest of Saws consists of handle, tightener and three blades—one 18-inch blade, one 14-inch compass blade and one 10-inch keyhole blade.

HACK SAW BLADES.



	Each	Dozen		Each	Dozen
6 inches.....	\$0.05	\$0.45	10 inches.....	\$0.08	\$0.70
7 inches.....	.06	.50	11 inches.....	.09	.80
8 inches.....	.06	.55	12 inches.....	.10	.90
9 inches.....	.07	.60			

DISSTONS' CAST STEEL COMPASS SAWS.



Apple Handle, Cast Steel Blade.

	Each.		Each.
10 inches.....	\$0.30	14 inches.....	\$0.38
12 inches.....	.35	16 inches.....	.40

NEST OF SAWS.



Combining one each—keyhole, compass and pruning saw.....Set. \$0.80

No. 5. KEYHOLE SAW AND PAD.

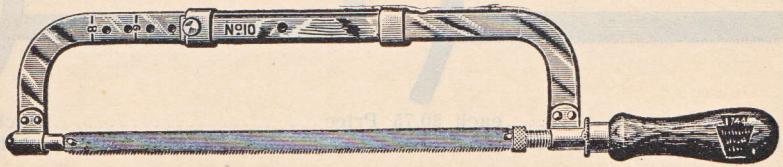


This is a cheap and convenient combination set, saw pad and screw driver....Set. \$0.15
We also have the extra blade for the above saw.

HACK SAW FRAMES

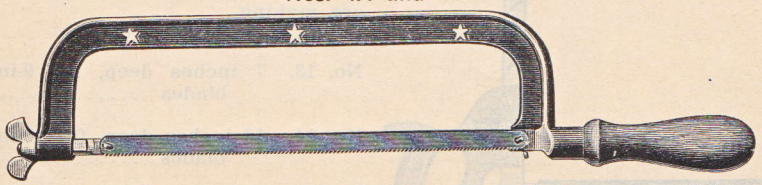


Solid frame to hold 8-inch blades only; polished and nickel-plated.....Each. \$0.65



Extension frame; it is light and quickly adjusted; polished and nickel-plated; it carries blades 6, 7, 8, 9, 10, 11 and 12 inches long.....Each. \$0.90

PATENT STAR HACK SAW FRAMES. Nos. 4A and 4B.

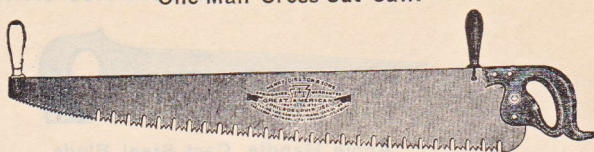


This Cast Iron Frame is so constructed as to face blades in four different directions. The pins which hold the blade are fast in the frame and cannot drop out. It is a very stiff and desirable Frame with Japan finish.

	Each.
No. 4A, for 8-inch blades.....	\$0.25
No. 4B, for 9-inch blades.....	.25



GREAT AMERICAN. SUPPLEMENTARY HANDLE. One-Man Cross-Cut Saw.



Length	3 feet.	3½ feet.	4 feet.	4½ feet.	5 feet.	5½ feet.	6 feet.
Each	\$1.75	\$2.00	\$2.25	\$2.50	\$3.00	\$3.25	\$3.50

GREAT AMERICAN TOOTH Two-Men Cross-Cut Saw.



Length	4 feet.	4½ feet.	5 feet.	5½ feet.	6 feet.	7 feet.	8 feet.
Each	\$1.75	\$2.00	\$2.25	\$2.65	\$2.90	\$3.25	\$3.60
Climax handles for Great American two-men cross-cut saw.....	per pair \$0.30						

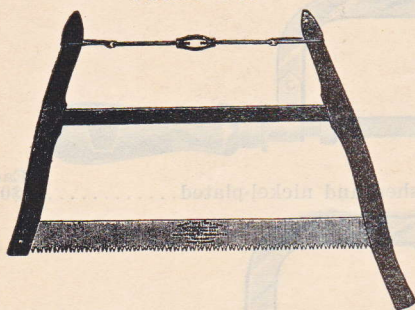
PLAIN TOOTH.



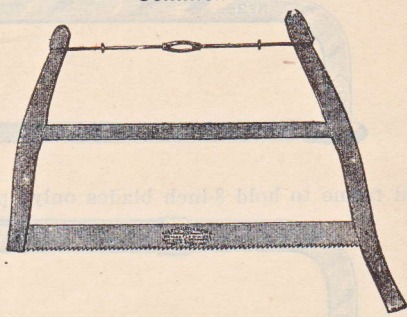
Length	4 feet.	4½ feet.	5 feet.	6 feet.	7 feet.	8 feet.
Each	\$1.60	\$1.75	\$1.90	\$2.50	\$3.00	\$3.40

WOOD SAWS.

Patent Tooth.

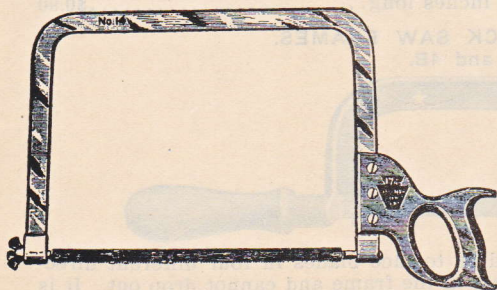


Common Tooth.



Price	each \$0.75	Price	each \$0.65
Saw bucks	each \$0.40	Saw bucks	each \$0.40

DEEP HACK SAW FRAMES.

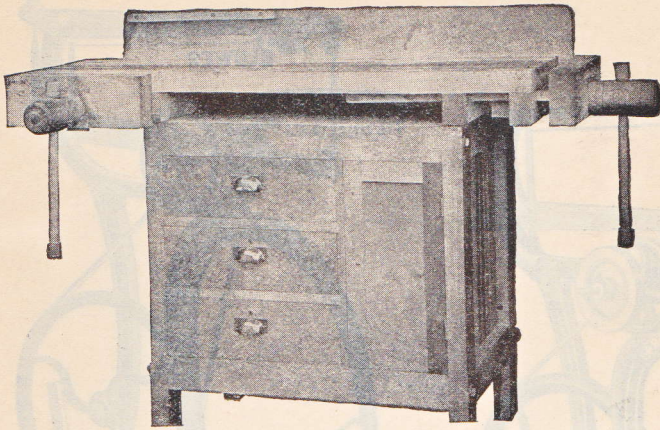


We are occasionally asked for extra deep and strong frames for large and heavy work, and to meet such demand are making

No. 13.	7 inches deep, for 9-inch blades	Each. \$1.35
No. 14.	10 inches deep, for 12-inch blades	1.60
No. 15.	6 inches deep, for 12-inch blades only	1.30

These saws are especially adapted for sawing girder rails. We also have the above saw with two handles, suitable for 18-inch blades only.....\$2.00

MANUAL TRAINING BENCHES.



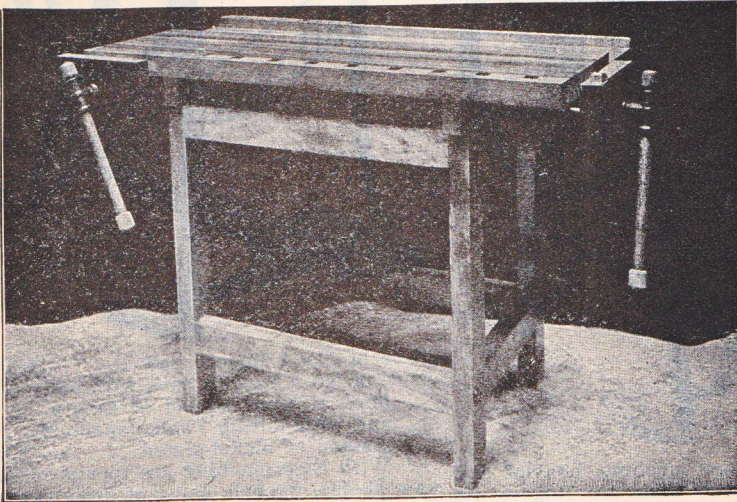
No. 13. Bench.

48 inches long.
22 inches wide.
32 inches high.

Neatly finished in every respect.

Equipped with two vises and a cupboard.

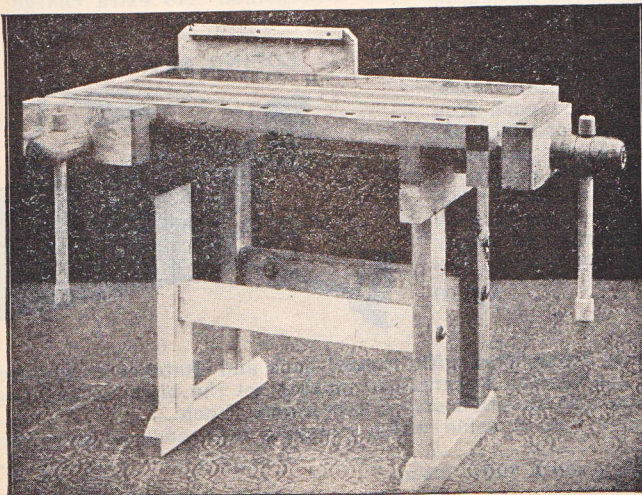
Each\$15.00



No. 21. Bench.

With 2 iron vises, jaws 10 inches, and wood facing; top 4 feet long, 22 inches wide, 32 inches high, with tool rack on back edge of top; stand bolted, bench oiled.

Each ...\$10.00



No. 7. Bench.

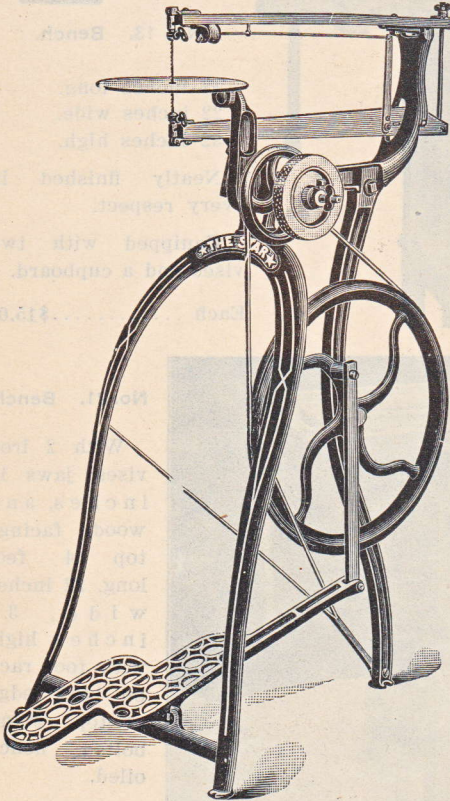
42 inches long.
20 inches wide.
32 inches high.

Front and end vise with 12-inch jaws and 2-inch maple screws and tool rack.

Each\$9.00



STAR SCROLL SAW.



This is a new machine, heavier and of a higher grade than the Rogers, its distinctive feature being in the method of hanging the arms.

In adjustment of arms so that they may be kept parallel with each other.

Heavier drive wheel for heavier work.

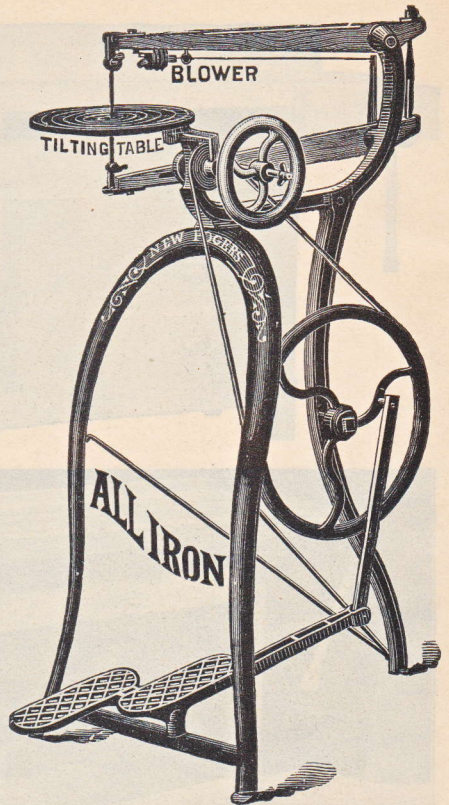
Two balance wheels, one each iron and emery, the extra weight of additional wheel giving steadiness to the motion.

A chuck for holding drill points.

The emery wheel is fastened by adjustable clamps, which can also be used for holding various other sizes of emery wheels, grindstones, buffing wheels, etc.

Price\$5.00

THE NEW ROGERS SAW.

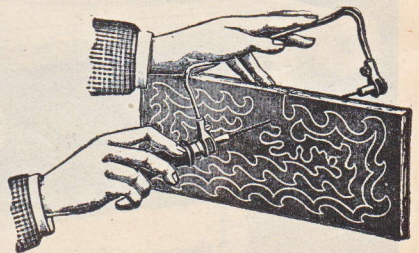


Price of No. 2 Rogers Saw.....\$4.00

Price of No. 1 Rogers Saw, with balance of Iron instead of Emery, and with Tilting Table Japanned instead of nickel-plated..... 3.50

With each machine are furnished six saw blades, wrench, sheet of designs and three drill points. No extra charge for boxing.

COPING SAW.

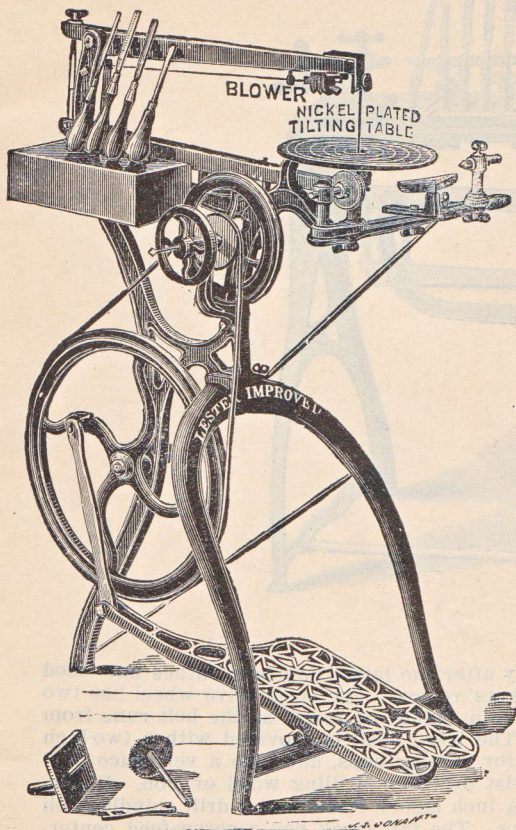


The Ratchet Frame is constructed with a steel back and Ratchet arrangement (see illustration), which enables the workman to quickly set the blade at any angle by the handle and the button at the other end of saw frame. Each.....\$1.00

This saw is also made with a cable which connects both ends of saw frame
Each\$1.35

Extra blades for coping saws, \$0.25 dozen.

LESTER IMPROVED SAW.



This machine is adapted alike to the use of either **amateurs** or **mechanics**, and will be found very convenient in **pattern making**.

The following parts are supplied with each machine, viz.: Twelve Saw Blades, one Wrench, Screw Driver, three Sheets of Designs, and a nice box for the small tools.

When shipped it is taken apart and packed in a box, but can easily be set up by following the directions accompanying each machine.

Price of Saw and Lathe complete.....\$10.00

Price for the Saw only, without Lathe and Circular Saw..... 8.00

When desired we furnish with the Lathe a very nice Drill Chuck for working metals and a Tail Stock with Screw Center, for.....extra 2.00

We also furnish a larger Table for Circular Saw, 6 by 7 inches, provided with a guide for sawing straight edges, for.....extra .50

Extra Bladesdoz. .10

The Lester Saw is made of iron and steel, except the Pitman and Arms, which are ash. The **iron work** is nicely japanned black, with stripes of red and gilt. The **wood work** is varnished, bringing out the beautiful grain of the ash.

The **Driving-wheel** is 15 inches in diameter, and weighs 13 pounds. The **Treadle** is made of iron, from a new and handsome pattern.

The **Scroll Sawing Attachment** is provided with a **Tilting Table** for inlaid work, the arms swinging 18 inches in the clear.

A **Dust Blower** which works automatically. The clamps will hold the coarsest or finest saw perfectly, while they are made adjustable to the right or left, or backwards and forwards, so that the blade may be kept in line. This saw will cut lumber from one-sixteenth inch to one-half inch in thickness.

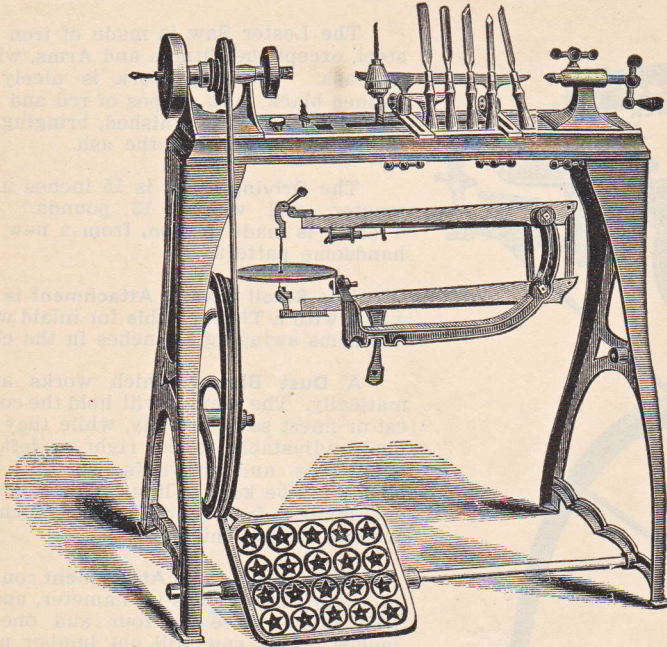
The **Circular Saw Attachment** consists of a saw three inches in diameter, and an iron table, three by four and one-half inches. This saw will cut lumber up to one-half inch.

The machine is also furnished with a **Solid Emery Wheel** and **Drilling Attachment**, accompanied by six best Stubbs Steel Drills of assorted sizes.

The **Lathe Attachment** is provided with iron ways and rests, steel centers, and three fine steel turning tools. Length of bed, 15 inches. Distance between centers, 9 inches. Swing, 3 inches. Length of slide rest, 4 inches.



LATHE AND SAW ATTACHMENTS.



This Lathe is patterned almost exactly after the latest improved lathes now used in the best machine shops and pattern makers' rooms. The large drive wheel has two grooves of varying depth on its face, to give a change of speed, as the belt runs from it to the cone pulley on the lathe head. The lathe head is provided with a two-inch face plate, a spur center, a screw center for turning cups, and also a very nice drill chuck to hold from 0 to $\frac{1}{4}$ inch round twist drills for drilling wood or iron. It also has on the outer side of the pulley a $4\frac{1}{2} \times \frac{7}{8}$ inch emery wheel and a drill spindle, with chuck to hold drill points for wood drilling. The tail stock has a screw-feed center, which is secured at any point desired by a clamping arrangement like that on the modern engine lathes. It is also provided with a long and short tool rest, five turning tools, wrench, drill points, etc., etc. Swing of lathe, 5 inches. Length of bed, 24 inches. Distance between centers, $13\frac{1}{2}$ inches.

The Scroll Sawing Attachment, as shown in the cut, is secured to the lathe bed by one bolt, and can be put on or off at pleasure. This attachment has all the improvements found in any of our scroll saws.

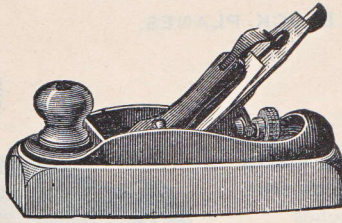
The Circular Saw Attachment consists of a saw table 6 x 7 inches, a saw 3 inches in diameter, and a saw arbor. The Lathe rest socket is used to support the table.

This Lathe is thoroughly built and highly finished, the polished parts being nickel-plated. Weight, Lathe and Saw boxed, 78 pounds.

Price of Lathe and Lathe Tools.....	\$10.00
Price of Scroll Saw Attachment.....	1.50
Price of Circular Saw Attachment.....	1.00

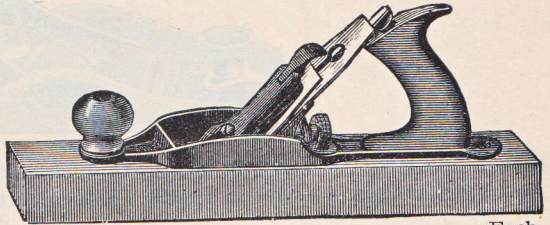
In ordering please state whether either or both of the saw attachments are wanted.

ADJUSTABLE PLANES.

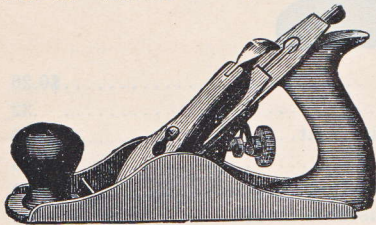


			Each.
No. 21.	Smooth Plane,	7 inches in length, 1¼-inch cutter.....	\$1.20
No. 22.	Smooth Plane,	8 inches in length, 1¼-inch cutter.....	1.20
No. 23.	Smooth Plane,	9 inches in length, 1¼-inch cutter.....	1.20
No. 24.	Smooth Plane,	8 inches in length, 2-inch cutter.....	1.20
No. 25.	Block Plane,	9½ inches in length, 1¼-inch cutter.....	1.20
No. 35.	Handle smooth,	9 inches in length, 2-inch cutter.....	1.50
No. 36.	Handle smooth,	10 inches in length, 2¾-inch cutter.....	1.50

JACK, FORE AND JOINTER PLANES.



			Each.
No. 26.	Jack Plane,	15 inches in length, 2-inch cutter.....	\$1.35
No. 27.	Jack Plane,	15 inches in length, 2½-inch cutter.....	1.50
No. 28.	Fore Plane,	18 inches in length, 2¾-inch cutter.....	1.65
No. 29.	Fore Plane,	20 inches in length, 2¾-inch cutter.....	1.65
No. 30.	Jointer Plane,	22 inches in length, 2¾-inch cutter.....	1.75



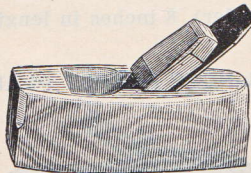
IRON SMOOTH,

JACK AND FORE PLANES.

Each Plane is thoroughly tested and put in perfect working order, before being sent into the market. A printed description of the method of adjustment accompanies each Plane.

			Each.
No. 2.	Adjustable Smooth Plane,	7 inches long, 1½-inch cutter.....	\$1.65
No. 3.	Adjustable Smooth Plane,	8 inches long, 1¾-inch cutter.....	1.75
No. 4.	Adjustable Smooth Plane,	9 inches long, 2-inch cutter.....	1.95
No. 4½.	Adjustable Smooth Plane,	10 inches long, 2¾-inch cutter.....	2.25
No. 5.	Adjustable Jack Plane,	14 inches long, 2-inch cutter.....	2.25
No. 6.	Adjustable Fore Plane,	18 inches long, 2¾-inch cutter.....	2.75
No. 7.	Adjustable Jointer Plane,	22 inches long, 2¾-inch cutter.....	3.25

WOOD SMOOTH PLANES.



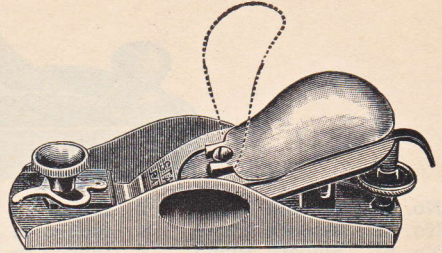
Used by Floor Planers.

Single Irons	\$0.60
Double Iron .....	.80

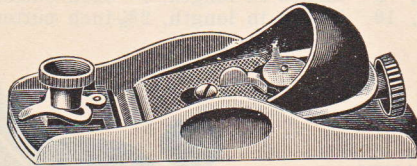


BLOCK PLANES.

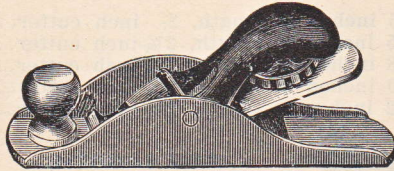
The knuckle-joint in the cap makes it a lever, to clamp the cutter in its seat.
 No. 18. Nickel trimmings, 6 inches in length, $1\frac{3}{4}$ -inch cutter.....\$1.00



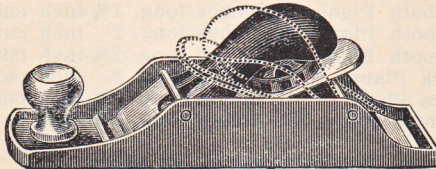
LOW ANGLE.



Nickel Trimmings, 6 inches in length, $1\frac{1}{2}$ -inch cutter.....\$0.60
 Nickel Trimmings, 7 inches in length, $1\frac{3}{4}$ -inch cutter..... .65

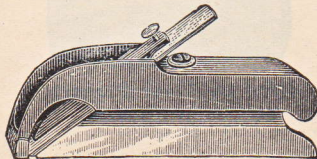


No. 101. $3\frac{1}{2}$ inches long, 1- inch cutter\$0.20
 No. 102. $5\frac{1}{2}$ inches long, $1\frac{1}{4}$ -inch cutter32
 No. 103. $5\frac{1}{2}$ inches long, $1\frac{1}{4}$ -inch cutter, with adjustment..... .45
 No. 110. $7\frac{1}{2}$ inches long, $1\frac{3}{4}$ -inch cutter45
 No. 120. $7\frac{1}{2}$ inches long, $1\frac{3}{4}$ -inch cutter, with adjustment..... .60
 No. $9\frac{1}{2}$. 7 inches long, $1\frac{3}{4}$ -inch cutter, with adjustable mouth..... .90



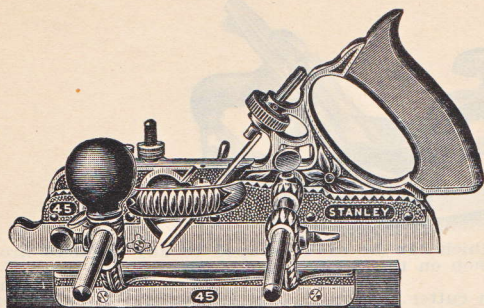
No. 130. Block Plane (double-ender), 8 inches in length, $1\frac{3}{4}$ -inch cutter.....\$0.60

BULL-NOSE RABBET PLANE.



No. 75. Iron stock, 4 inches in length, 1-inch cutter.....\$0.35

ADJUSTABLE BEADING PLANE.



"A Planing Mill within itself," says a country carpenter.

This Plane embraces (1) Beading and Center Beading Plane; (2) Rabbet and Filletster; (3) Dado; (4) Plow; (5) Matching Plane; (6) Sash Plane, and (7) a superior Slitting Plane.

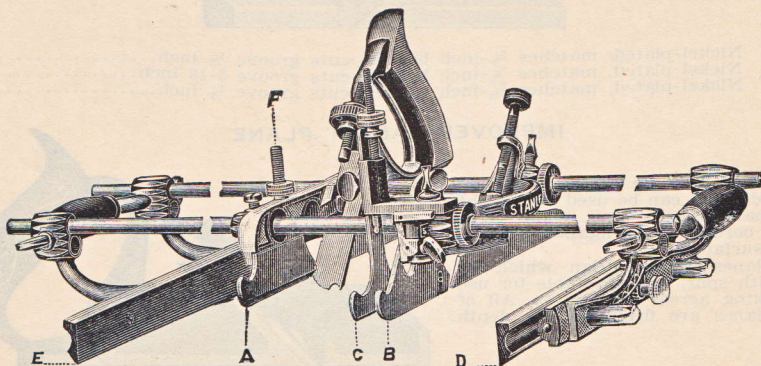
Each Plane has seven Beading Tools ($\frac{1}{8}$, 3-16, $\frac{1}{4}$, 5-16, $\frac{3}{8}$, 7-16 and $\frac{1}{2}$ inch), ten Plow and Dado Bits ($\frac{1}{8}$, 3-16, $\frac{1}{4}$, 5-16, $\frac{3}{8}$, 7-16, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, and $\frac{7}{8}$ inch), a Slitting Blade, a Tonguing Tool and a Sash Tool.

A removable rosewood face is attached to the fence. The Plane is sent out already set up for working, packed in a neat wooden box.

Nickel-plated, with twenty tools, bits, etc. Each. \$6.50

PATENT UNIVERSAL PLANE.

This tool, in the hands of an ordinary carpenter, can be used for all lines of work covered by a full assortment of so-called fancy planes.

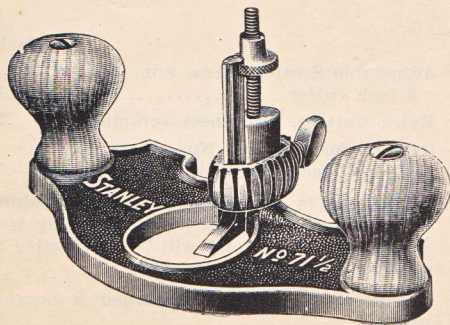


The Plane is nickel-plated; the fifty-two cutters are arranged in four separate cases; and the entire outfit is packed in a neat wooden box.

Universal Plane, with fifty-two tools, bits, etc. Each. \$12.00

WOODWORKERS' ROUTER PLANE.

With Closed Throat.

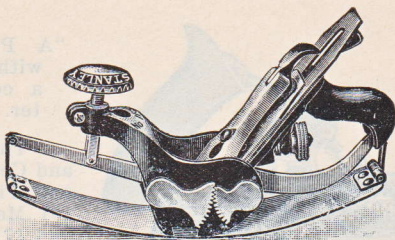


No. 71 $\frac{1}{2}$. Nickel-Plated Stock, with Steel Bits ($\frac{1}{4}$ and $\frac{1}{2}$ inch) Each \$1.35

Cutters for above Planes, ($\frac{1}{4}$ or $\frac{1}{2}$ inch) Each \$0.25



ADJUSTABLE CIRCULAR PLANES.

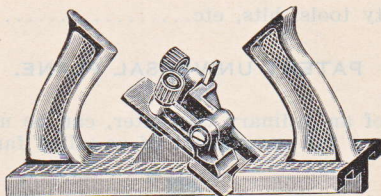


This Plane has a flexible steel face, which can be easily shaped to any required arc, either concave or convex, by turning the knob on the front of the plane.

No. 113. Adjustable Circular Plane, $1\frac{3}{4}$ -inch cutter..... Each. \$2.40

DOUBLE-END MATCH PLANE.

As shown in cut, this tool is provided with both tongue and groove irons. With one side a tongue can be cut, and by reversing ends, the Plane will cut a groove to fit. The tonguing tools are made wider on one side for use on thicker stuff than the plane will tongue and groove in the center.

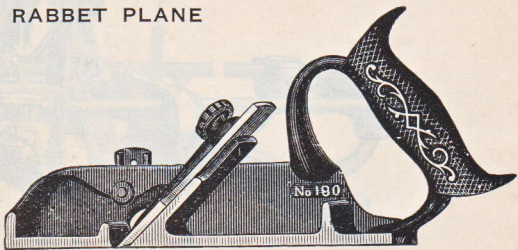


No. 146. Nickel-plated, matches $\frac{3}{8}$ -inch boards, cuts groove $\frac{1}{8}$ inch..... Each. \$1.75
 No. 147. Nickel plated, matches $\frac{5}{8}$ -inch boards, cuts groove $\frac{3}{16}$ inch..... 1.75
 No. 148. Nickel-plated, matches $\frac{7}{8}$ -inch boards, cuts groove $\frac{1}{4}$ inch..... 1.75

IMPROVED RABBIT PLANE

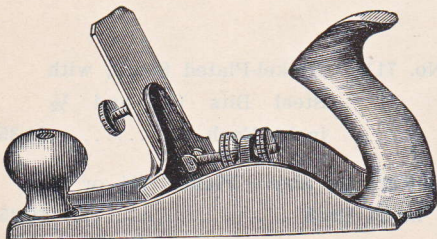
This Plane will lie perfectly flat on either side, and can be used with right or left hand equally well, while planing into corners or up against perpendicular surfaces.

The Planes of this design, which are fitted with spur, are adaptable for use for working across the grain. All of these Planes are fitted with a depth Gauge.



No. 180. 8 inches in length, $1\frac{1}{2}$ -inch wide..... Each. \$0.90
 No. 181. 8 inches in length, $1\frac{1}{4}$ -inch wide..... .90
 No. 182. 8 inches in length, 1- inch wide..... .90
 No. 190. 8 inches in length, $1\frac{1}{2}$ -inch wide, with spur..... 1.10
 No. 191. 8 inches in length, $1\frac{1}{4}$ -inch wide, with spur..... 1.10
 No. 192. 8 inches in length, 1- inch wide, with spur..... 1.10

ADJUSTABLE SCRAPER PLANE.

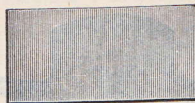


Adjustable Scraper Plane, 9 in. in length,
 3 inch cutter..... Each. \$1.75
 Extra Cutters, for veneer scraping..... .20
 Cutters, for toothing, Nos. 22, 28, 32 (22,
 28 or 32 teeth per inch)..... .30

This Tool is used for scraping and finishing veneered work. It can be used equally well as a Tooth Plane; and will be serviceable in scraping off old paint and glue.

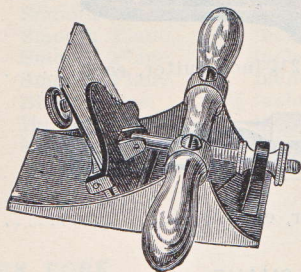
With each Plane is furnished a Scraper Blade.

HAND SCRAPER.



Each.

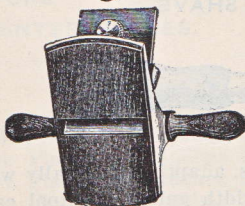
Hand Scrapers, "assorted".....	\$0.10
Floor Planers, Scrapers, "extra heavy", 3½x5.....	.20
No. 90. Adjustable Scrapers .....	.90



ADJUSTABLE VENEER SCRAPER.

For many kinds of work its peculiar form is of great advantage.

No. 12 Adjustable Veneer Scraper, 3-inch Cutter	\$2.00
Cutters for above Scraper.....	.20



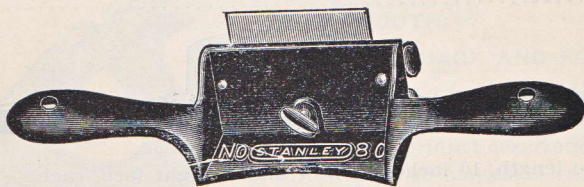
ADJUSTABLE VENEER SCRAPER.

WOOD FACE.

Each.

12½ Adjustable Veneer Scraper, 3-inch Cutter	\$2.65
Cutters for above Scrapers.....	.20

CABINET SCRAPER.

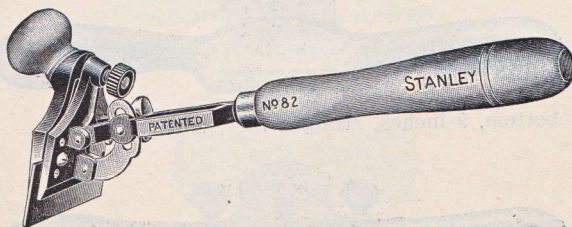


The blade of this Scraper may be sprung to a slight curve by the thumb-screw shown at the center of cut, which will be found a great advantage in working with this tool.

Each.

No. 80. Raised Handles, 11 inches, 2¾-inch blade.....	\$0.90
Cutters for above Scrapers .....	.20

SINGLE-HANDED CABINET SCRAPER.

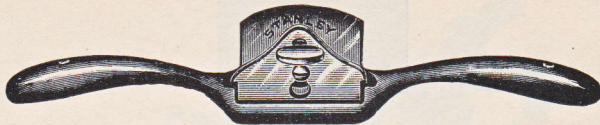


Each.

No. 82. Length 14½ inches, 3-inch blade.....	\$1.00
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SPOKE SHAVES.



No. 51. Double iron, raised handle, 10-inch, 2 1/8-inch cutter, each.....\$0.18



No. 52. Double iron, straight handle, 10 inches, 2 1/8-inch cutter, each.....\$0.30



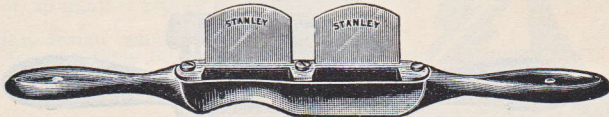
No. 72. Japanned, length 11 inches, 2-inch cutter, each.....\$0.85

UNIVERSAL SPOKE SHAVE.



This Spoke Shave has two detachable bottoms, adapting it equally well to circular work or straight, and, by means of a movable width gauge, the tool can be used in rabbeting.

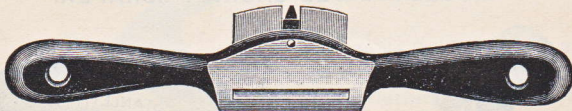
No. 67\$1.15



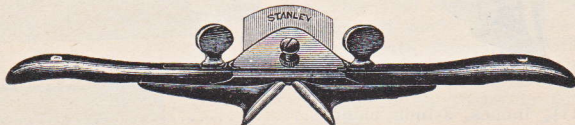
No. 60. Double length, 10 inches, hollow and straight face, each.....\$0.35



No. 62. Reversible length, 10 inches, straight face, each.....\$0.40



No. 63. Convex bottom, 9 inches, straight face, each.....\$0.35



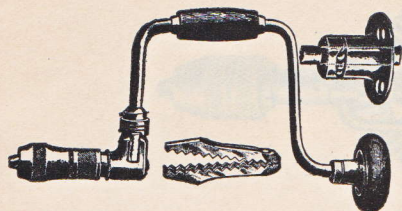
No. 65. Raised, 9 1/2 inches, straight face, each.....\$0.50

IMPROVED RATCHET BRACES.

Ball Bearing.



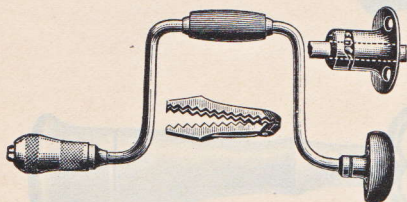
PRICES.



		Each.
No. 30.	14-inch sweep.....	\$1.75
No. 31.	12-inch sweep.....	1.65
No. 32.	10-inch sweep.....	1.60
No. 33.	8-inch sweep.....	1.40
No. 34.	6-inch sweep.....	1.30

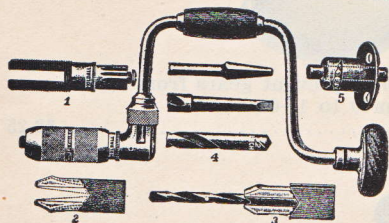
IMPROVED BRACES.

Ball Bearing.



		Each.
No. 11.	12-inch sweep.....	\$1.25
No. 12.	10-inch sweep.....	1.15
No. 13.	8-inch sweep.....	1.00

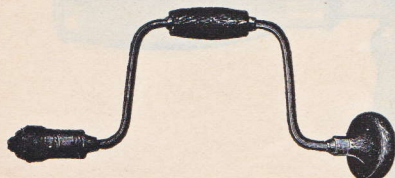
HOLDALL BRACE.



	Each.
14-inch sweep	\$2.50
12-inch sweep	2.25
10-inch sweep	2.00
8-inch sweep	1.75

IMPROVED BRACE.

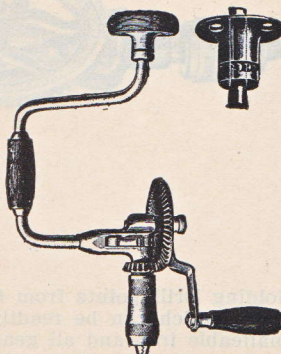
Not Ball Bearing.



	Each.
No. 71. 12-inch sweep	\$0.40
No. 72. 10-inch sweep .....	.35
No. 73. 8-inch sweep .....	.30
No. 82. 10-inch sweep, ratchet ....	.75
No. 83. 8-inch sweep, ratchet ....	.70

BRACE DRILL.

Ball Bearing.

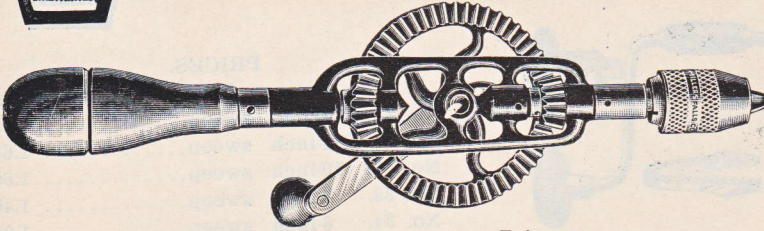


	Each.
Price	\$2.50



HAND DRILLS.

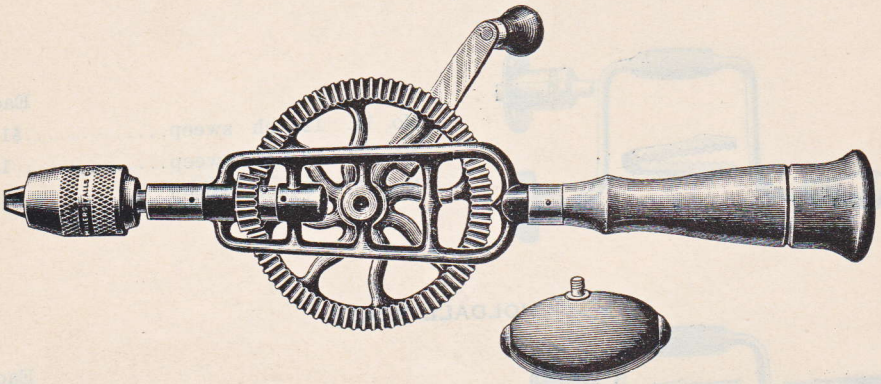
No. 05 Drill.



No. 5. Double geared, with 8 fluted drills. Price.....each \$1.50

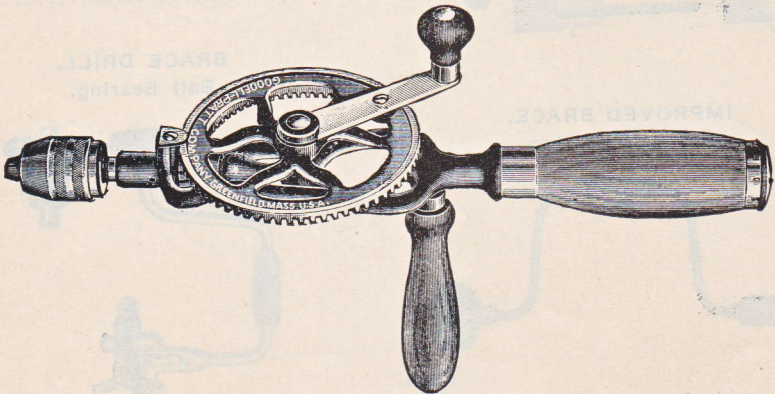
No. 2 Drill.

Ball Bearing.



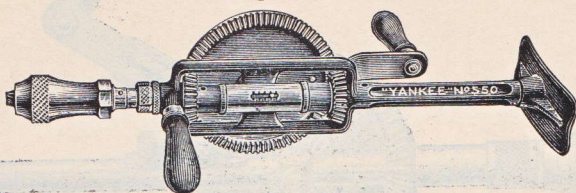
No. 2 has cut gears and an adjustable friction roll to prevent gears from springing out of engagement. The chuck holds from 0 to 17-64.
Price, with 8 fluted points.....\$2.25

No. 5 Drill.



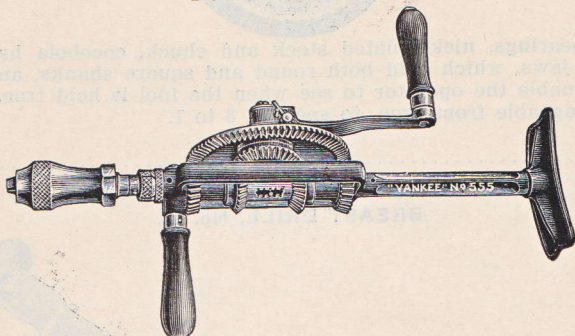
No. 5 Holding Drill points from 0 to $\frac{1}{4}$ in. It has a supplementary handle on the side which can be readily removed when desired. The frame is made of malleable iron and all gears have cut teeth well nickel plated; the steel chuck is nickel plated, has three jaws of hardened steel. Eight drill points are contained in the handle. Price.....\$2.00

YANKEE BREAST DRILL. Single Speed.



Extreme length, 18 inches, each.....\$4.25

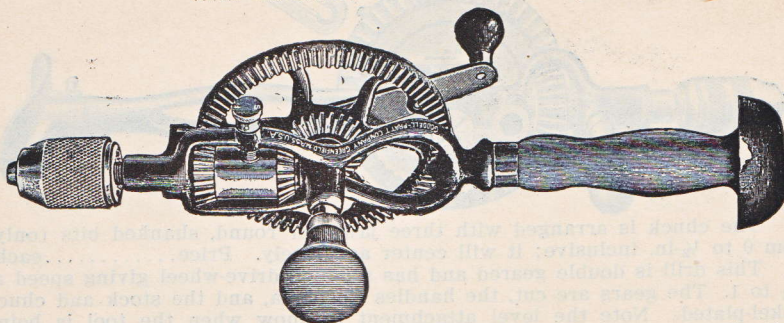
DOUBLE SPEED.



Extreme length, 18 inches, each.....\$5.00

HAND DRILL.

With Hardened Steel Cone Bearings.



Double gears, two speeds and a chuck, with capacity to $\frac{3}{8}$ inch. No drill points are furnished with this tool, each.....\$2.50

DRILL HEADS.

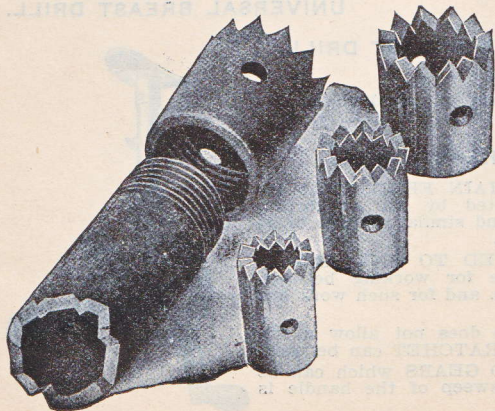
Screw the Head on a Piece of Pipe.

Each.

No. 6. Size pipe $\frac{3}{4}$ inch....\$0.30
No. 8. Size pipe $1\frac{1}{4}$ inches.. .30
No. 10. Size pipe 2 inches.. .30

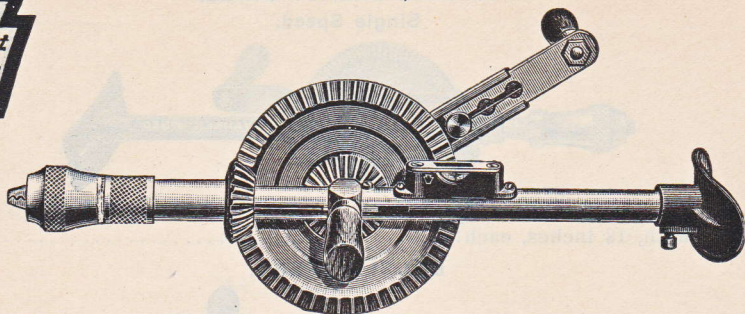
No. 6 drill $1\frac{1}{4}$ holes, No. 8 drills $1\frac{7}{8}$ holes, No. 10 drills $2\frac{3}{4}$ holes.

Other sizes in stock not listed here.





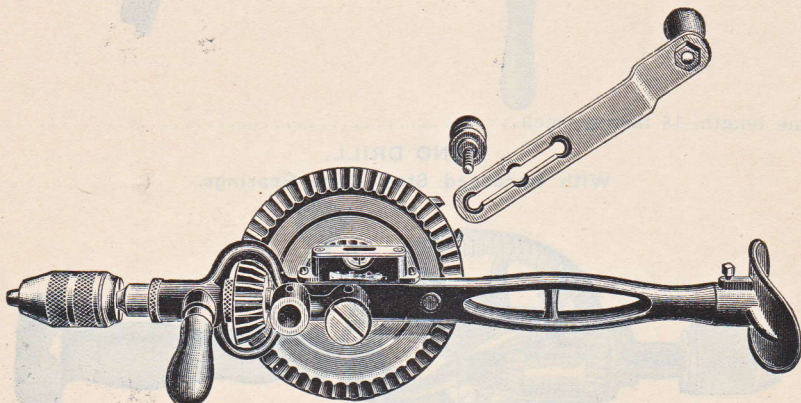
BREAST DRILL, No. 10.



With ball bearings, nickel-plated stock and chuck, cocobola handles, extension crank, alligator jaws, which hold both round and square shanks, and a patent level attachment to enable the operator to see when the tool is held true. The gears are cut and are changeable from even, to speeded 3 to 1.

No. 10 Each.
\$2.75

BREAST DRILL, No. 18.



No. 18. The chuck is arranged with three jaws for round, shanked bits (only) from 0 to $\frac{1}{2}$ -in. inclusive; it will center accurately. Price.....each \$3.50
No. 13. This drill is double geared and has a 6-inch drive-wheel giving speed at $4\frac{1}{2}$ to 1. The gears are cut, the handles Cocobola, and the stock and chuck nickel-plated. Note the level attachment to show when the tool is being held true, also the extension crank. Price.....each 3.50

UNIVERSAL BREAST DRILL.

THREE-JAW CHUCK BREAST DRILL.

No. 130. It holds all sizes of round shank bits from 0 to $\frac{1}{2}$ inch.....Each.
\$3.75

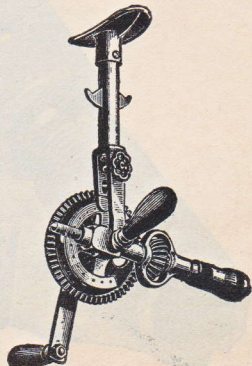
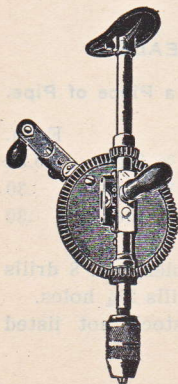
UNIVERSAL BREAST DRILL.

This drill has a CHAIN FEED ATTACHMENT which is operated by the supporting handle, allowing pipes and similar articles to be drilled with perfect ease.

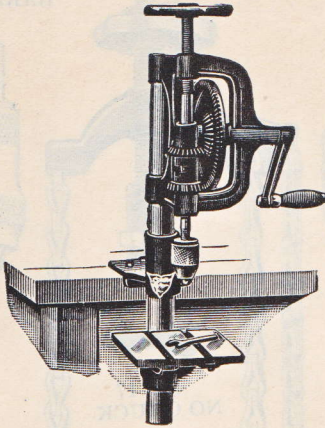
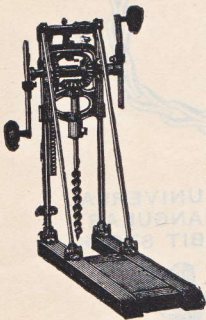
It can be ADJUSTED TO ANY ANGLE, making it indispensable for working between girders and ceiling joists, and for such work has a SCREW FEED.

When limited space does not allow a full turn of the handle, the RATCHET can be used.

It has TWO SPEED GEARS which can be readily changed. The sweep of the handle is also adjustable.



Price, each\$6.00

BENCH DRILL, No. 10.Capacity 0 to $\frac{1}{2}$ inch.**BORING MACHINE.**

This machine has been fully perfected in all its parts. The gate is made of $\frac{1}{2}$ -inch round steel rods; the braces are the same, and attach to the rods at the top by a set screw. When this set screw is loosened the frame falls over so as to bore at any desired angle.

The depth of hole to be bored is fixed by a stop, as seen on the left hand upper rod in the cut. When the gate strikes this stop, a latch is lifted, and the machine throws itself into gear by the use of a spring, and the auger is

lifted out of the hole by continuing to turn the crank in the same direction.

When the auger is drawn from the hole the frame hangs itself up until the machine is moved to the next hole, then it is dropped down by turning the crank back until the auger strikes the wood, when it is thrown out of gear and proceeds to bore the next hole. As seen in the cut, the machine has adjustable cranks, which fully regulate its speed and power. Price, each.....\$6.50

GLUE POTS.

Sizes.	Each.
300.....	\$0.30
00.....	.35
0.....	.40
1.....	.45
2.....	.50
3.....	.60
4.....	.80
5.....	.90



Upright Shaft, polished steel tube $1\frac{1}{2}$ inches diameter, 24 inches long; all the working parts of the machine are clamped to it.

Gears are cut from solid blanks and run smoothly.

Chuck: A Three-Jawed Chuck, capacity 0 to $\frac{1}{2}$ inch, furnished and fitted to each machine.

Table milled and slotted, size, $6 \times 6\frac{1}{2}$ inches, adjustable up and down, or right and left, or can be entirely removed, and work blocked up from the floor, if desired.

Speeds: Two, changed by throwing cam attached to shifter knob.

It is a thoroughly well made and practical machine in every sense of the word, and excessive weight has been obviated by using a tubular shaft.

Price, complete with Chuck, \$12.00 each.



In glass

bottles....	\$0.10
$\frac{1}{2}$ gill.....	.14
1 gill.....	.17
$\frac{1}{2}$ pint.....	.25
1 pint.....	.40
1 quart....	.70
$\frac{1}{2}$ gallon...	1.25
1 gallon...	2.65

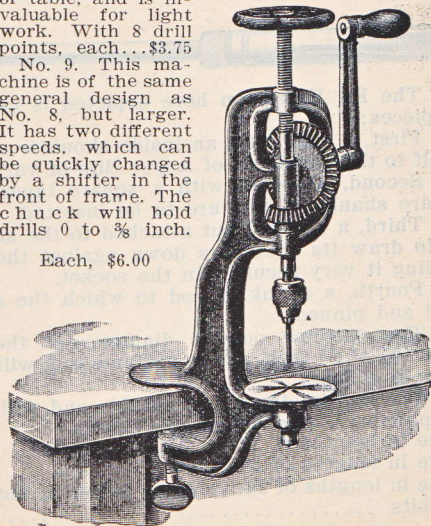
NEW BENCH DRILL No. 8.

This is a well-made, neatly finished little drill, with cut gearing, and chuck which will hold drills 0 to $\frac{1}{4}$ inch. It is made to clamp

fast to any bench or table, and is invaluable for light work. With 8 drill points, each...\$3.75

No. 9. This machine is of the same general design as No. 8, but larger. It has two different speeds, which can be quickly changed by a shifter in the front of frame. The chuck will hold drills 0 to $\frac{3}{8}$ inch.

Each, \$6.00





AUTOMATIC DRILLING ATTACHMENT.

No. 1.....each \$1.75
No. 2.....each 2.25



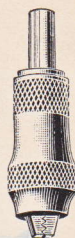
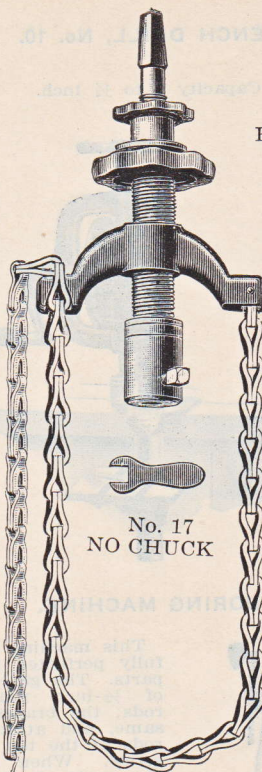
MILLERS FALLS CHAIN DRILLS.

These Drills can be fed automatically or with a hand feed at the option of the operator. The automatic feed is self-regulating, according to the size of the drill, feeding very rapidly or slowly as may be desired. The frame is japanned with polished socket. Made in three styles:

No. 17, Chain Drill with plain socket; ½ inch hole with set screw.....each \$1.25
No. 18 is No. 17 with Barber Chuck added, for holding square bit shankseach 1.90
No. 19 is No. 17 with Three Jawed Star Chuck added, for holding round shanks from 0 to ½ inch.....each 3.00

STAR

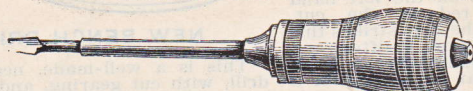
BARBER



No. 17
NO CHUCK

BARBER EXTENSION BIT HOLDER, No. 1.

UNIVERSAL ANGULAR BIT STOCK.



12, 15, 18, 21 and 24 inches.....each \$0.75
EXTENSION BIT HOLDER No. 3.



The Bit Extension here depicted is composed of four parts or pieces:

First, a shell with an inside shoulder so shaped as to adjust itself to the shoulders of Auger Bits of varying sizes and shapes.
Second, a socket with a square taper hole into which the square shanks of bits are to be inserted.

Third, a knurled nut attached to the shell in such a manner as to draw its shoulders down against the shoulder of the bit, holding it very securely in the socket.

Fourth, a shank or rod to which the square socket is soldered and pinned.

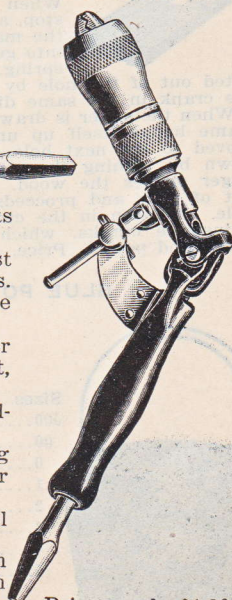
The extreme outside diameter of the shell is something under ⅝ of an inch, so the extreme tool will follow a ⅝ or larger bit into a hole.

The tool is strong and durable and will be found very useful for plumbers, electricians and others.

Made in lengths of 12, 15, 18, 21 inches.....\$0.90 each

Made in lengths of 24 inches.....1.00 each

Made in lengths of 24 inches to follow ¾ inch or larger bits1.25 each



Price, each, \$1.20

No. 2. HANDLED FIRMER CHISELS.

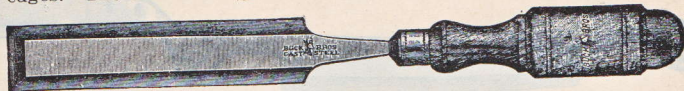
Sharp and honed. The 1-inch is 5½ inches long from bolster to point.



1/8 inch.....	each \$0.20	5/8 inch.....	each \$0.26	1 1/4 inch.....	each \$0.43
1/4 inch.....	" .22	3/4 inch.....	" .29	1 1/2 inch.....	" .49
3/8 inch.....	" .23	7/8 inch.....	" .34	1 3/4 inch.....	" .60
1/2 inch.....	" .24	1 inch.....	" .34	2 inch.....	" .73
Set of 12 (one of each).....					set, \$4.25

No. 30. HANDLED FIRMER CHISELS.

Beveled edges. The 1-inch is 5½ inches long from bolster. Ground sharp and honed.



1/8 inch.....	each \$0.35	5/8 inch.....	each \$0.43	1 1/4 inch.....	each \$0.65
1/4 inch.....	" .38	3/4 inch.....	" .45	1 1/2 inch.....	" .75
3/8 inch.....	" .38	7/8 inch.....	" .48	1 3/4 inch.....	" .90
1/2 inch.....	" .40	1 inch.....	" .50	2 inch.....	" 1.00
Set of 12 (one of each).....					set, \$6.75

No. 34. STANDARD EXTRA SOCKET FIRMER CHISELS.

Beveled edges. The 1-inch is 6 inches long in the blade.



1/8 inch.....	each \$0.50	5/8 inch.....	each \$0.65	1 1/4 inch.....	each \$0.80
1/4 inch.....	" .50	3/4 inch.....	" .65	1 1/2 inch.....	" .90
3/8 inch.....	" .50	7/8 inch.....	" .70	1 3/4 inch.....	" 1.00
1/2 inch.....	" .60	1 inch.....	" .75	2 inch.....	" 1.20
Set of 12 (one of each).....					set, \$7.35

No. 33. STANDARD EXTRA SOCKET FIRMER CHISELS.

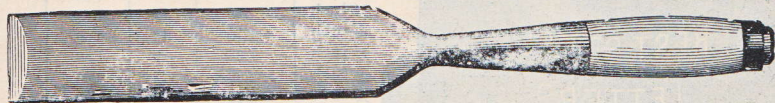
The 1-inch is 6 inches long in the blade.



1/8 inch.....	each \$0.30	5/8 inch.....	each \$0.40	1 1/4 inch.....	each \$0.56
1/4 inch.....	" .32	3/4 inch.....	" .42	1 1/2 inch.....	" .62
3/8 inch.....	" .34	7/8 inch.....	" .47	1 3/4 inch.....	" .68
1/2 inch.....	" .36	1 inch.....	" .50	2 inch.....	" .75
Set of 12 (one of each).....					set, \$5.25

SOCKET FIRMER CHISELS.

1/8 inch.....	each \$0.25	5/8 inch.....	each \$0.30	1 1/4 inch.....	each \$0.40
1/4 inch.....	" .25	3/4 inch.....	" .32	1 1/2 inch.....	" .42
3/8 inch.....	" .25	7/8 inch.....	" .35	1 3/4 inch.....	" .45
1/2 inch.....	" .28	1 inch.....	" .38	2 inch.....	" .50
Sets from 1/8 to 1 1/2 inches, 9 pieces.....					set, \$2.60
Sets from 1/8 to 2 inches, 12 pieces.....					set, 3.75

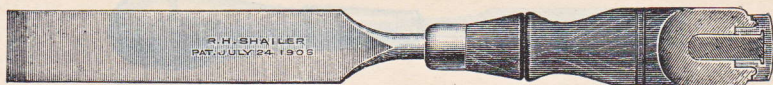
SOCKET FRAMING CHISELS.

1/4 inch.....	each \$0.35	3/4 inch.....	each \$0.42	1 1/2 inch.....	each \$0.60
3/8 inch.....	" .35	7/8 inch.....	" .45	1 3/4 inch.....	" .65
1/2 inch.....	" .35	1 inch.....	" .50	2 inch.....	" .70
5/8 inch.....	" .40	1 1/4 inch.....	" .55		



"SOLID SHANK" FIRMER CHISEL.

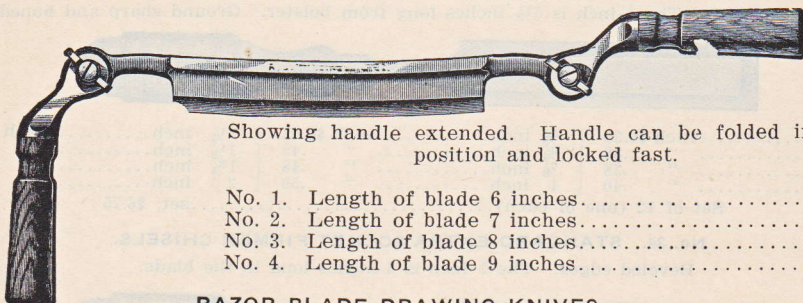
Ready for Use.



Note.—You strike the chisel, not the handle.

Size, inches	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
Each	\$0.65	\$0.70	\$0.75	\$0.85	\$0.95	\$1.00

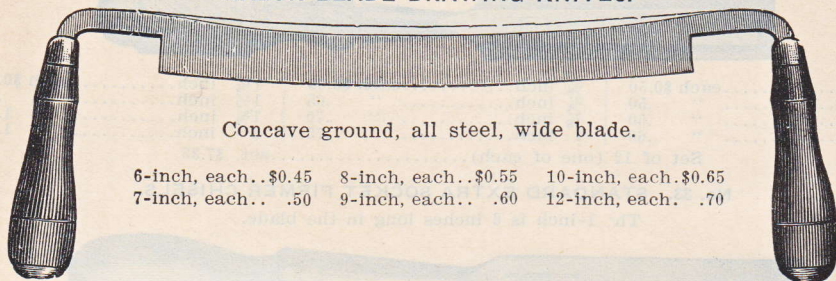
ADJUSTABLE DRAWING KNIVES.



Showing handle extended. Handle can be folded in any position and locked fast.

	Each.
No. 1. Length of blade 6 inches.....	\$1.60
No. 2. Length of blade 7 inches.....	1.80
No. 3. Length of blade 8 inches.....	1.90
No. 4. Length of blade 9 inches.....	2.00

RAZOR BLADE DRAWING KNIVES.



Concave ground, all steel, wide blade.

6-inch, each..	\$0.45	8-inch, each..	\$0.55	10-inch, each..	\$0.65
7-inch, each..	.50	9-inch, each..	.60	12-inch, each..	.70



AMERICAN LETTERS AND FIGURES Machine Made.

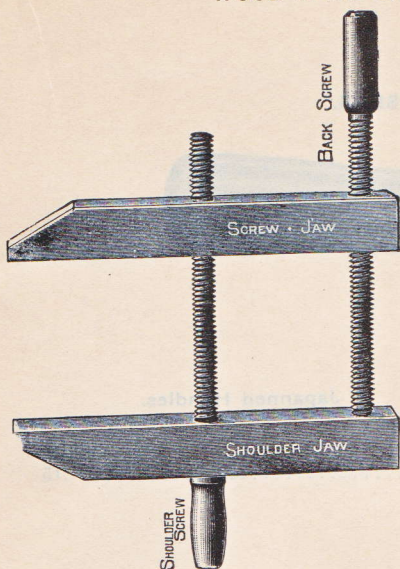
For stamping soft metals,
wood and leather.



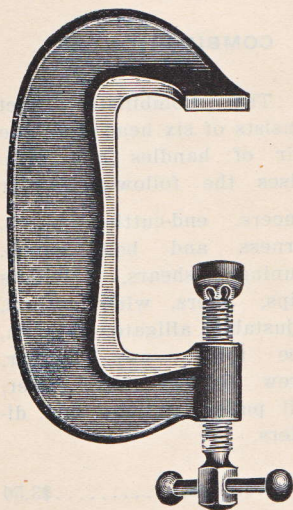
SIZE	FIGURES PER SET OF 9	EACH	LETTERS PER SET OF 27	EACH
$\frac{1}{32}$ -inch	.90	.10	\$2.25	\$.25
$\frac{1}{16}$ -inch	.80	.10	1.90	.20
$\frac{1}{8}$ -inch	.65	.10	1.60	.20
$\frac{1}{4}$ -inch	.65	.10	1.60	.20
$\frac{3}{8}$ -inch	.65	.10	1.60	.20
$\frac{1}{2}$ -inch	.65	.10	1.60	.20
$\frac{5}{8}$ -inch	.80	.10	1.90	.25
$\frac{3}{4}$ -inch	.90	.10	2.25	.25
$\frac{7}{8}$ -inch	.95	.12	2.50	.25
1-inch	1.25	.15	3.00	.30
$\frac{3}{4}$ -inch	1.65	.20	4.50	.45
$\frac{1}{2}$ -inch	2.00	.22	5.50	.55
$\frac{1}{4}$ -inch	2.50	.25	7.20	.65

Every set is put up in a neat, compact, dust-proof wooden box, properly labeled—handy to the person using them.

WOOD HAND SCREWS (Best Quality).

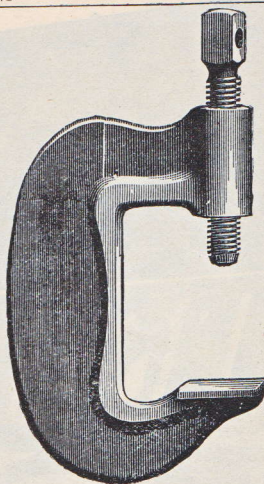


Nos.	Diameter of Screws.	Whole Length of Screws.	Whole Length of Jaws.	Size of Jaws.	Open	Price per Dozen.	Each.
	inch.	inch.	inch.	inch.	inch.		
800	1 1/4	28	24	3	17	\$13.00	\$1.25
801	1 1/4	26	22	2 3/4	15 1/2	11.50	1.15
802	1 1/4	24	20	2 1/2	13 3/4	10.65	1.00
803	1 1/4	22	20	2 1/2	12	9.90	.90
804	1 1/4	22	18	2 1/2	12 1/4	9.50	.85
805	1 1/8	20	18	2 3/8	10 1/2	8.95	.80
806	1	20	16	2 3/8	11	8.30	.75
807	1	18	16	2 1/4	9 1/4	7.80	.70
808	7/8	18	14	2 1/8	10	7.30	.65
809	7/8	16	14	2	8 1/4	6.65	.60
810	7/8	16	12	1 7/8	8 1/2	6.25	.60
811	3/4	14	12	1 3/4	7 1/4	5.65	.55
812	3/4	12	10	1 5/8	5 1/2	4.00	.50
813	5/8	10	8	1 3/8	4 1/2	4.00	.45
814	5/8	8	7	1 1/8	3	3.25	.35
815	1/2	6	5	1	2	2.65	.30
816	3/8	5	4	7/8	1 1/4	2.50	.28



HEAVY STEEL CLAMP.

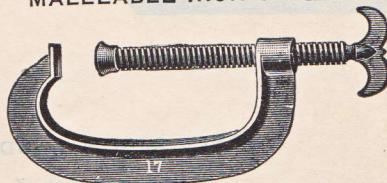
No.	Each.
1 opening to 2 in..	\$1.50
2 opening to 3 in..	1.75
3 opening to 4 in..	2.00
4 opening to 5 in..	2.25
5 opening to 6 in..	2.40
6 opening to 8 in..	2.85
7 opening to 10 in..	3.35
8 opening to 12 in..	3.75
9 opening to 14 in..	4.35
10 opening to 16 in..	5.25
11 opening to 18 in..	6.50



MECHANICS' CLAMP.

No.	Each.
1 opening to 2 in..	\$1.25
2 opening to 3 in..	1.35
3 opening to 4 in..	1.55
4 opening to 5 in..	1.80
5 opening to 6 in..	2.00
6 opening to 7 in..	2.25
7 opening to 8 in..	2.50
8 opening to 9 in..	2.75

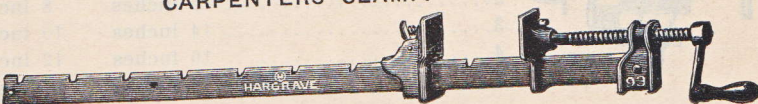
MALLEABLE IRON CLAMPS.



No.	12	13	14	15	16	17	18	20
Opens	2 1/2-in.	3-in.	4-in.	5-in.	6-in.	7-in.	8-in.	10-in.
Price, each.	\$0.15	\$0.18	\$0.25	\$0.30	\$0.40	\$0.50	\$0.55	\$0.65

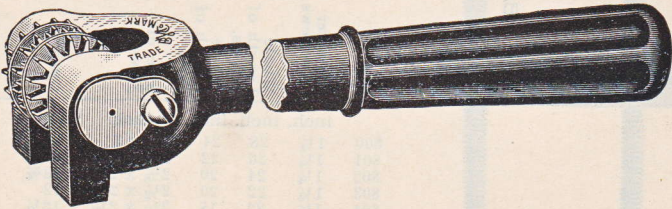
CARPENTERS' CLAMP.

	Each.
3 feet	\$1.75
4 feet	2.00
6 feet	2.25





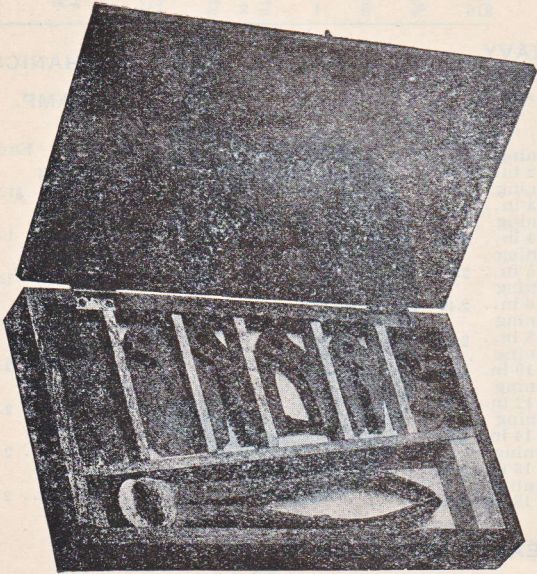
EMERY WHEEL DRESSERS.



Hard Steel Bearings.

Japanned Handles.

With Extra Set of Cutters. Each.....\$0.75
Milled Cutters. Per set..... .15



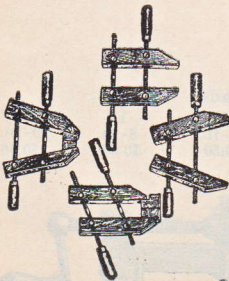
COMBINATION KIT.

The Combination Set consists of six heads and one pair of handles and comprises the following tools:

Pincers, end-cutting pliers, harness and belt punch, pruning shears, tinner's snips, pliers, wire cutters, adjustable alligator wrench, pipe tongs, nut cracker, screw driver, tack puller, nail puller, calipers and dividers.

Complete set\$3.50

STEEL SCREW HAND-SCREWS.



No.	Length of		Each.
	Jaws.	Opening between Jaws.	
0.....	8 inches	4 inches	\$0.55
1.....	10 inches	6 inches	.60
2.....	12 inches	8 inches	.65
3.....	14 inches	10 inches	.75
4.....	16 inches	12 inches	.85
5.....	18 inches	14 inches	1.00

RUSSELL JENNINGS' CAST STEEL AUGER BITS.



	Each.		Each.
3-16 inch	\$0.25	10-16 inch	\$0.42
4-16 inch .....	.25	11-16 inch .....	.46
5-16 inch .....	.25	12-16 inch .....	.50
6-16 inch .....	.29	13-16 inch .....	.54
7-16 inch .....	.33	14-16 inch .....	.59
8-16 inch .....	.36	15-16 inch .....	.63
9-16 inch .....	.40	16-16 inch .....	.68

PUGH'S OR ARROW BRAND CAST STEEL AUGER BITS.



	Each.		Each.
3-16 inch	\$0.36	10-16 inch	\$0.55
4-16 inch .....	.36	11-16 inch .....	.60
5-16 inch .....	.36	12-16 inch .....	.66
6-16 inch .....	.36	13-16 inch .....	.68
7-16 inch .....	.36	14-16 inch .....	.77
8-16 inch .....	.44	15-16 inch .....	.83
9-16 inch .....	.50	16-16 inch .....	.88

Carpenter Augers, 22 cents per $\frac{1}{4}$ inch.

THE "SYRACUSE" TWIST DRILL BIT FOR WOOD.

Guaranteed to cut off Nails or Screws, and to Bore Brick or Plastering.



	Each.		Each.
No. 2	\$0.10	No. 8	\$0.20
No. 3 .....	.10	No. 9 .....	.25
No. 4 .....	.10	No. 10 .....	.25
No. 5 .....	.12	No. 11 .....	.28
No. 6 .....	.15	No. 12 .....	.28
No. 7 .....	.18		

LONG WOOD BRACE DRILLS.

For Bell Hangers, Telephone and Telegraph Work.



These drills will go through plastering, nails, and even brick walls, and can be readily sharpened when dull. The numbers indicate the diameter in 32ds of an inch.

		12	18	24	30	36 inches long.
No. 6.....	Price each,	.35	.50	.60	.75	.90
No. 8.....	"	.35	.50	.60	.75	.90
No. 10.....	"	.38	.55	.65	.80	.90
No. 12.....	"	.40	.55	.65	.80	.90
No. 14.....	"	.50	.60	.75	.90	.95
No. 16.....	"	.55	.65	.80	.95	1.00
No. 18.....	"	.60	.75	.90	1.00	1.10
No. 20.....	"	.65	.80	.95	1.00	1.10
No. 22.....	"	.75	.90	1.00	1.10	1.20
No. 24.....	"	.80	.95	1.10	1.20	1.25

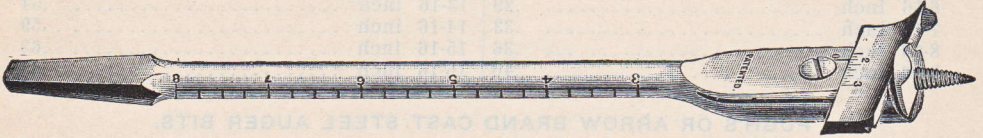


ROSE COUNTERSINKS.



Cast steel, to $\frac{1}{2}$ -inch diam., 15c.; to $\frac{5}{8}$ -inch diam., 18c.; to $\frac{3}{4}$ -inch diam., 20c.

EXPANSION BIT.



- No. 1. Boring from $\frac{1}{2}$ to $1\frac{1}{2}$ inches.....each \$0.75
 No. 2. Boring from $\frac{7}{8}$ to 3 inches.....each 1.00

We also carry extra cutters for the above.

SQUARE REAMER.

Cast steel, 25c.



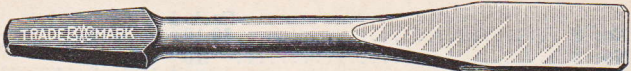
HALF ROUND REAMER.

Cast steel... 25c.

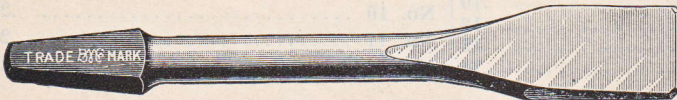


SCREW DRIVER BITS.

Cast steel..... 12c.



Cast steel
extra heavy,
15c.



FLAT COUNTERSINKS.



Cast steel12c

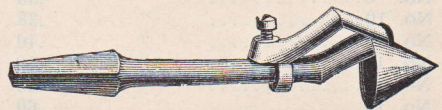
RIVET SETS.



Each.

- No. 00. For belt rivets, No. 1.....\$0.45
 No. 0. For belt rivets, No. 2..... .40
 No. 1. For belt rivets, No. 3..... .35
 No. 2. For belt rivets, Nos. 4 and 5..... .35
 No. 3. For belt rivets, Nos. 6 and 7..... .30
 No. 4. For belt rivets, No. 8..... .30

WHEELER'S PATENT COUNTERSINK.



With adjustable depth gauge.
Price, 25c.

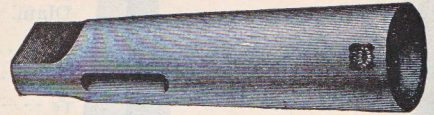
PRENTICE DRILLS.

With One-half Inch Shank, for Fitting
Blacksmith Drill Presses.



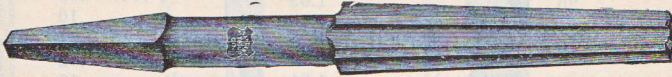
Diam. Inches	Price Each.	Diam. Inches.	Price Each.
$\frac{1}{8}$	\$0 20	$\frac{9}{16}$	\$0 54
$\frac{3}{8}$	20	$\frac{1}{2}$	60
$\frac{1}{2}$	23	$\frac{5}{8}$	63
$\frac{3}{4}$	25	$\frac{3}{4}$	68
$\frac{7}{8}$	27	$\frac{7}{8}$	72
$\frac{1}{4}$	30	$\frac{1}{4}$	77
$\frac{5}{8}$	32	$\frac{1}{2}$	84
$\frac{1}{2}$	34	$\frac{3}{4}$	90
$\frac{3}{8}$	36	$\frac{1}{2}$	98
$\frac{1}{4}$	39	$\frac{1}{4}$	1 04
$\frac{3}{8}$	40	$\frac{1}{2}$	1 10
$\frac{1}{2}$	43	$\frac{3}{4}$	1 17
$\frac{3}{4}$	45	$\frac{1}{2}$	1 25
$\frac{7}{8}$	50	$\frac{1}{4}$	1 35
$\frac{1}{4}$		$\frac{1}{2}$	

STEEL SLEEVES FOR TAPER SHANK DRILLS.



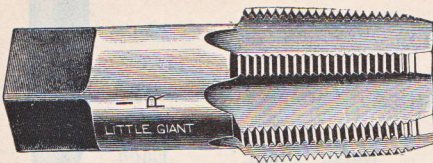
	Each
No. 1. Fitted to No. 2 Socket.....	\$1.00
No. 1. Fitted to No. 3 Socket.....	1.00
No. 1. Fitted to No. 4 Socket.....	1.00
No. 2. Fitted to No. 3 Socket.....	1.40
No. 2. Fitted to No. 4 Socket.....	1.40
No. 3. Fitted to No. 4 Socket.....	1.70

STANDARD BIT STOCK TAPER REAMERS.



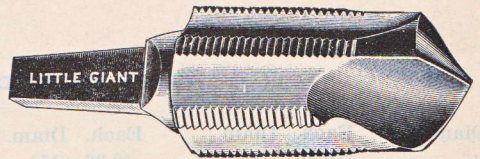
Diameter, Inches.	Price, Each.	Diameter, Inches.	Price, Each.
$\frac{1}{4}$	\$0 15	$\frac{9}{16}$	\$0 37
$\frac{3}{8}$	23	$\frac{1}{2}$	45
$\frac{1}{2}$	25	$\frac{5}{8}$	52
$\frac{3}{4}$	26	$\frac{3}{4}$	60
$\frac{7}{8}$	30		

STRAIGHT PIPE TAPS.



Sizes . . .	$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.
Prices each	25	25	35	45	58
Sizes	1 in.	1 1/4 in.	1 1/2 in.	2 in.	
Prices each	80	85	\$1 05	\$1 40	

COMBINED PIPE TAP AND DRILL. For tapping gas and water pipes, under Pressure.



Sizes . . .	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	1 in.
Prices each	\$1 20	\$1 40	\$1 75	\$2 25	\$2 85
Sizes	1 1/4 in.	1 1/2 in.	2 in.	2 1/2 in.	
Prices each	\$3 85	\$4 65	\$6 00	\$8 00	

STOVE BOLT TAPS.



These taps are made to correspond in sizes and threads to the American Screw Company's stove bolts. Other sizes and threads will be charged as special.

Sizes.	No. of Threads	Each.	Sizes.	No. of Threads	Each.
$\frac{5}{8}$	28	\$0 11	$\frac{1}{4}$	18	\$0 12
$\frac{3}{4}$	24	11	$\frac{1}{2}$	18	12
$\frac{1}{2}$	22	11	$\frac{3}{8}$	16	14



BIT STOCK DRILLS. TAPER SQUARE SHANK.
For Metal or Wood. FITTING RATCHETS.



Diam.	Each.
1/16	\$0.06
3/32	.07
7/64	.09
5/32	.11
3/16	.14
7/32	.15
1/4	.17
9/32	.20
5/16	.22
11/32	.24
3/8	.28
13/32	.31
7/16	.34
15/32	.37
1/2	.40



Diam.	Each.
1/4	\$0.75
9/32	.78
5/16	.82
11/32	.86
3/8	.90
13/32	.92
7/16	.92
1/2	.98
9/16	1.00
5/8	1.05
11/16	1.09
3/4	1.16
25/32	1.25
13/16	1.31
27/32	1.42
7/8	1.54
29/32	1.65
15/16	1.75
31/32	1.80
1	1.90
1 1/32	2.02
1 1/16	2.14



STUBS' STEEL WIRE GAUGE DRILLS.
And Straight Shank.

No.	Each.
1 to 5	\$0.11
6 to 10	.12
11 to 15	.10
16 to 20	.10
21 to 25	.09
26 to 30	.08
31 to 35	.07
36 to 40	.06
41 to 45	.05
46 to 60	.04

Straight Shank.

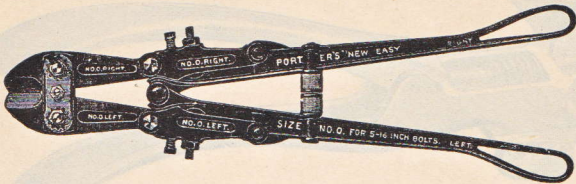
Dia.	Each.	Dia.	Each.
1/16	\$0.05	19/64	\$0.16
5/64	.05	5/16	.17
3/32	.06	13/64	.18
7/64	.06	1/2	.20
1/8	.07	25/64	.21
9/64	.08	27/64	.23
5/32	.08	29/64	.24
11/64	.09	31/64	.25
3/16	.10	13/32	.27
7/32	.11	7/16	.28
15/64	.12	29/32	.29
1/4	.13	31/32	.32
5/16	.14	1	.34
3/8	.15	1 1/2	.35

TAPER SHANK DRILLS.

Diam.	Each.	Diam.	Each.	Diam.	Each.	Diam.	Each.
1/8	\$0.20	23/64	\$0.36	37/64	\$0.60	51/64	\$0.98
5/32	.20	3/8	.36	19/32	.60	13/16	.98
11/64	.23	25/64	.39	33/64	.63	53/64	1.00
1/16	.23	13/32	.39	7/8	.63	27/32	1.04
13/64	.25	27/64	.40	41/64	.68	55/64	1.10
7/32	.25	1/2	.40	21/16	.68	7/8	1.10
15/64	.27	29/64	.43	43/64	.72	57/64	1.15
1/4	.27	15/32	.43	11/16	.72	29/32	1.17
17/64	.30	31/64	.45	45/64	.77	59/64	1.20
9/32	.30	1/2	.45	23/32	.77	13/16	1.25
19/64	.32	33/64	.50	47/64	.84	61/64	1.30
5/16	.32	17/32	.50	3/4	.84	31/32	1.30
33/64	.34	29/32	.54	49/64	.90	63/64	1.35
11/32	.34	1/2	.54	25/32	.90	1	1.35

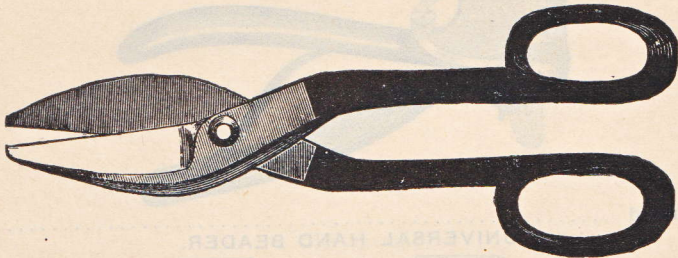


“NEW EASY” BOLT CLIPPERS.



	Each.
No. 0. For 5-16-inch bolts.....	\$2.00
No. 1. For 3/8-inch bolts.....	3.25
No. 2. For 1/2-inch bolts.....	4.00
No. 3. For 5/8-inch bolts.....	5.00

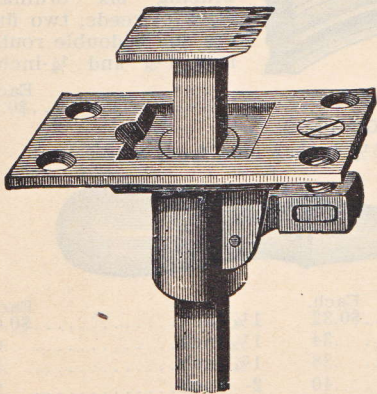
TINNERS' HAND SHEARS.



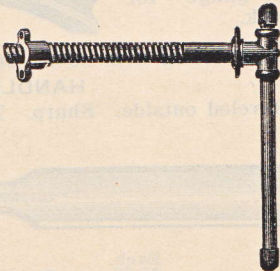
Every Pair Warranted.

Length of cut, inches.....	2½	3	3½	4	4½
Per Pair	\$1.00	\$1.25	\$1.50	\$1.80	\$2.25

BENCH HOOKS.



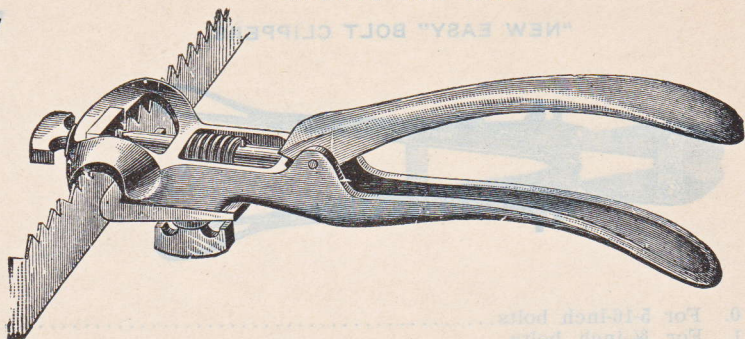
BENCH SCREWS.



	Each.
No. 21. Bench hook	\$0.40
No. 1. Perfect bench hook.....	.50
1- inch	\$0.35
1½-inch .....	.40
1¾-inch .....	.45
1½-inch .....	.85

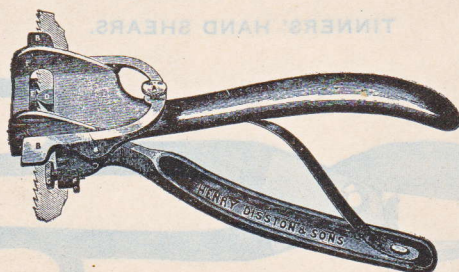


PERFECT SAW SET.



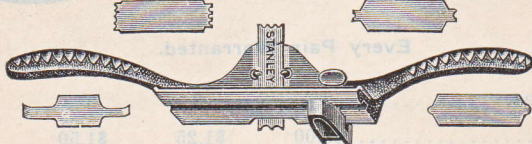
No. 1. Perfect saw set	Each. \$0.80
No. 3. Perfect cross-cut saw set	1.35

MONARCH SAW SET.

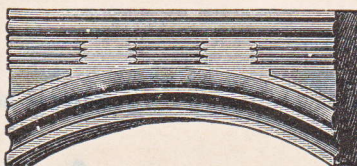


No. 1. Japanned	Each. \$0.50
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UNIVERSAL HAND BEADER.



For beading, reeding or fluting straight or irregular surfaces, and for all kinds of light routing. With square gauge for straight and an oval gauge for curved work.

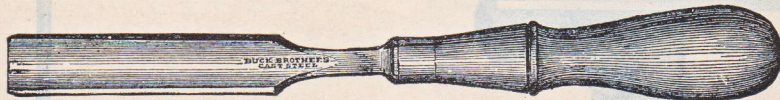


Seven superior steel cutters go with each tool. Both ends are sharpened, thus embracing six ordinary sizes of reeds, two fluters and a double router iron ($\frac{1}{8}$ and $\frac{1}{4}$ -inch).

Nickel-plated Stock, with seven Steel Cutters.....	Each. \$0.85
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HANDLED FIRMER GOUGES.

Beveled outside. Sharp. The 1-inch is $5\frac{1}{2}$ inches long from bolster.



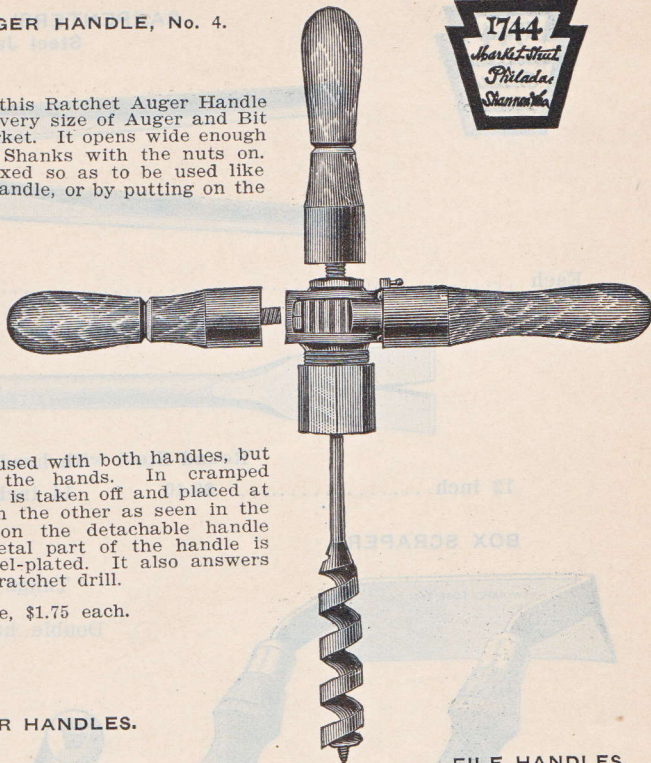
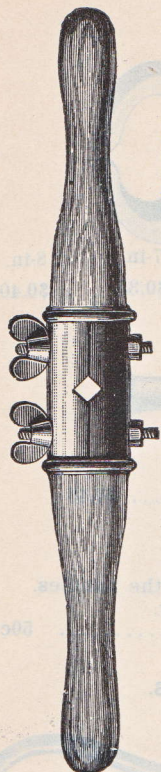
$\frac{1}{8}$ -inch.....	Each. \$0.23	$\frac{5}{8}$ -inch.....	Each. \$0.32	$1\frac{1}{4}$ -inch.....	Each. \$0.62
$\frac{1}{4}$ -inch.....	.24	$\frac{3}{4}$ -inch.....	.34	$1\frac{1}{2}$ -inch.....	.65
$\frac{3}{8}$ -inch.....	.27	7-8-inch.....	.38	$1\frac{3}{4}$ -inch.....	.80
$\frac{1}{2}$ -inch.....	.30	1- inch.....	.40	2- inch.....	.85

CARPENTERS' SLICKS.

$2\frac{1}{2}$ -inch.....	Each. \$1.00	$3\frac{1}{2}$ -inch.....	Each. \$1.30
3- inch.....	1.10	4- inch.....	1.50

RATCHET AUGER HANDLE, No. 4.

The chuck of this Ratchet Auger Handle will hold almost every size of Auger and Bit Shanks in the market. It opens wide enough to take in Auger Shanks with the nuts on. It can be made fixed so as to be used like a common auger handle, or by putting on the



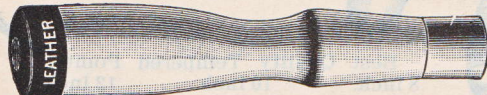
ratchet it can be used with both handles, but without shifting the hands. In cramped places, one handle is taken off and placed at a right angle with the other as seen in the cut. The wood on the detachable handle revolves. The metal part of the handle is polished and nickel-plated. It also answers the purpose of a ratchet drill.

Price, \$1.75 each.

PATENT AUGER HANDLES.

	Each.
No. 1.....	\$0.50
No. 2.....	.60

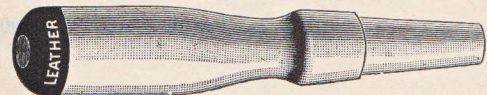
LEATHER HEAD CHISEL HANDLES.



Polished Wood.

	Apple.	Hickory.
	Each.	Each.
Tang Firmer Chisel Handles...	\$0.12	\$0.10
Socket Firmer Chisel Handles...	.08	.08
Socket Framing Chisel Handles	.08	.08

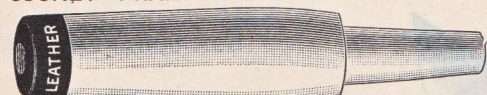
SOCKET FIRMER CHISEL HANDLES.



Polished Applewood, Leather Head.

	Doz.	Each.
Assorted set of 12.....	\$0.75	\$0.08
Small or medium sizes.....	.75	.08
Large size .....	.75	.08

SOCKET FRAMING CHISEL HANDLES.



	Leather Head.	
Dozen.....	\$0.75	Each.....\$0.08

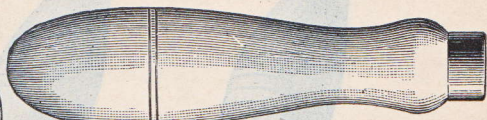
HATCHET HANDLES.

	Selected Hickory
	Each.
Regular	\$0.05
Germantown .....	.10

TURNER, DAY & WOOLWORTH MFG. CO., LOUISVILLE, KY.



FILE HANDLES.



Soft Wood, Brass Ferrules.

	Doz.	Each.
Assorted, four sizes.....	\$0.25	\$0.03
Assorted, large sizes.....	.25	.03
Large size .....	.25	.03

ADZE HANDLES.



Each.....\$0.20

AXE HANDLES.



Dozen.....\$2.50 Each.....\$0.25

ADZE EYE NAIL HAMMER HANDLES.



Each.....\$0.08

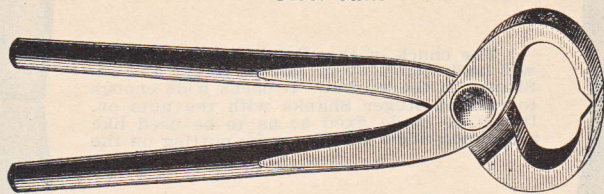
SAW HANDLES.



Beechwood, each..\$0.12
Applewood, each....25

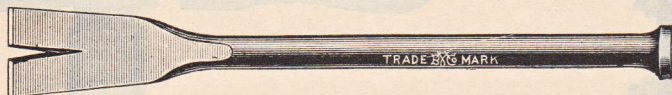


CARPENTERS' PINCERS. Steel Jaw.



	6-in.	7-in.	8-in.
Each	\$0.25	\$0.35	\$0.40

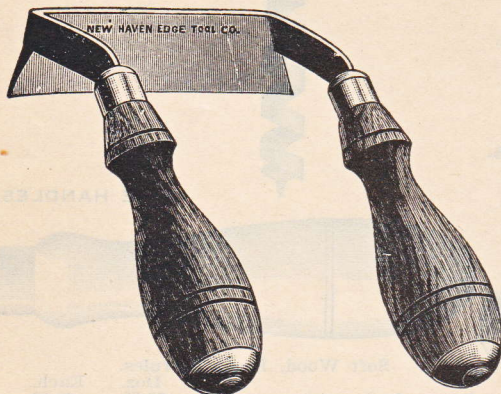
BOX CHISELS.



Round Steel with head.

12 inch.....	\$0.40	14 inch.....	\$0.45
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BOX SCRAPERS.



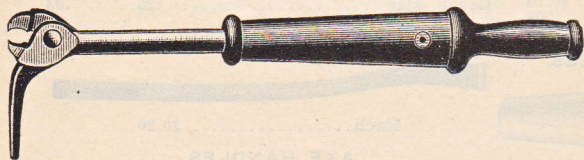
Tangs riveted through the handles.
Best Quality.
Double handle 50c

BOX HOOKS.



Best Quality Tempered Points.		
8 inch.	10 inch.	12 inch.
25c	35c	50c each

LITTLE GIANT NAIL PULLERS.



No. 2. Small size.....\$0.75

No. 1. Large size..... 1.00

PATENT ADJUSTABLE BOX SCRAPER.

Malleable iron, 2-inch cutter,
wood handle. Price..... 50c

BOX SCRAPER.

Wood handle.

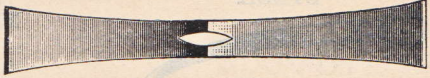
Triangular blade. Price, 50c

Triangular blade, ship
scraper. Price..... 75c

BRICKLAYERS' HAMMERS.



DOUBLE EDGE OR SCUTCH.



"Rose's" Scutch Each \$1.45

Weight.	Each.
1½-pound	\$0.65
2-pound .....	.75
2½-pound .....	.85

BRICK TROWELS. Philadelphia Pattern.



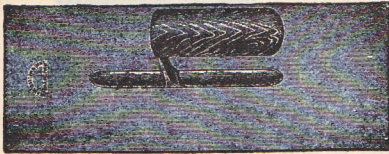
Rose's Brick Trowels.

Round and Square Heel.

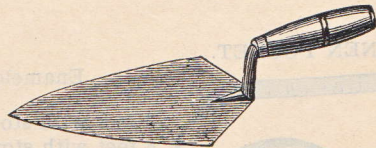
	Each		Each
8-inch	\$0.90	10½-inch	\$1.14
8½-inch .....	.96	11-inch	1.18
9-inch	1.00	11½-inch	1.20
9½-inch	1.06	12-inch	1.27
10-inch	1.10		

Handy Brick Trowels, 25c.

PLASTERING TROWELS.

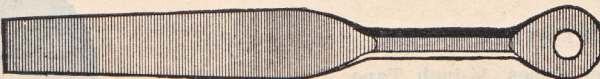


POINTING TROWELS.



Plastering Trowels.						Each	
	10-in.	10½-in.	11-in.	11½-in.	12-in.	Rose's Pointing Trowels.....	\$0.50
Each..	\$0.90	\$0.90	\$1.00	\$1.15	\$1.25	Handy Pointing Trowels.....	.15

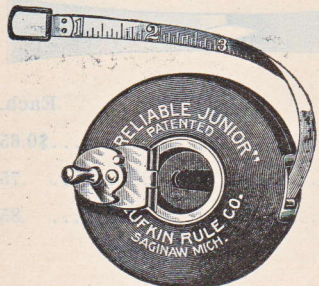
BRICKLAYERS' LINE PINS.



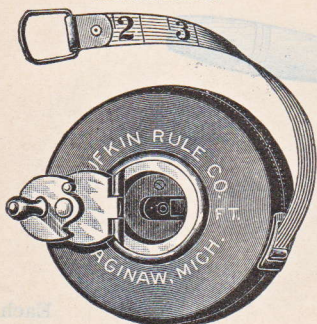
	Dozen.	Each.
Tempered Steel Line Pins.....	\$1.00	\$0.10
Extra thin Bricklayers' Hand-made Linen Lines, 100 ft. balls.....		25c ball



STEEL.



METALLIC.

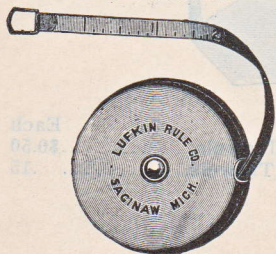


ASS SKIN MEASURING TAPES.

 $\frac{1}{2}$ -inch Cotton Tape.

	Each.
25-ft. Ass Skin Tapes.....	\$0.40
50-ft. Ass Skin Tapes.....	.60
75-ft. Ass Skin Tapes.....	.70
100-ft. Ass Skin Tapes.....	.80

LINEN POCKET.



POCKET STEEL TAPES.

in Leather Cases, $\frac{1}{4}$ -inch Tape.

	Each.
3 feet long, with stop.....	\$0.50
5 feet long, with stop.....	1.25

STEEL MEASURING TAPES.

With $\frac{3}{8}$ -inch Tapes, Double Folding Flush Handle.

	Each.
25 feet, marked in 10ths and 12ths.....	\$3.50
50 feet, marked in 10ths and 12ths.....	5.50
75 feet, marked in 10ths and 12ths.....	8.00
100 feet, marked in 10ths and 12ths.....	9.75

CHALLENGE TAPES.—Flush Handle.

	Each.
25 feet, marked in 10ths and 12ths.....	\$2.60
50 feet, marked in 10ths and 12ths.....	3.25
75 feet, marked in 10ths and 12ths.....	4.25
100 feet, marked in 10ths and 12ths.....	5.50

JUNIOR STEEL TAPES.

 $\frac{3}{8}$ -inch Tapes, Double Flush Handle.

	Each.
25 feet, marked in 10ths and 12ths.....	\$3.00
50 feet, marked in 10ths and 12ths.....	3.50

METALLIC MEASURING TAPES.

 $\frac{5}{8}$ -inch Tapes, Double Flush Handle.

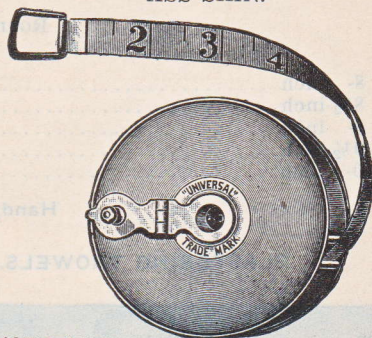
	Each.
25 feet, marked in 10ths and 12ths.....	\$1.70
50 feet, marked in 10ths and 12ths.....	2.50
75 feet, marked in 10ths and 12ths.....	3.00
100 feet, marked in 10ths and 12ths.....	3.50

JUNIOR METALLIC TAPES.

 $\frac{3}{8}$ -inch Tapes.

	Each.
25 feet, marked in 10ths and 12ths.....	\$1.50
50 feet, marked in 10ths and 12ths.....	1.75

ASS SKIN.

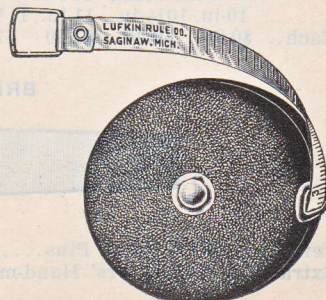


POCKET TAPES.

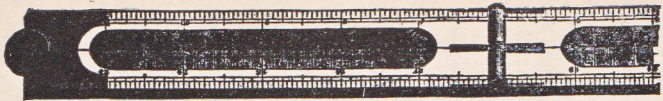
Enameled Linen Tapes, Nickel-Plated Cases.

	Eacn.
3 feet with stop, linen tape $\frac{1}{4}$ inch wide.....	\$0.35
5 feet with stop, linen tape $\frac{1}{4}$ inch wide.....	.40
6 feet with stop, linen tape $\frac{1}{4}$ inch wide.....	.50

STEEL POCKET.



BOXWOOD RULES.

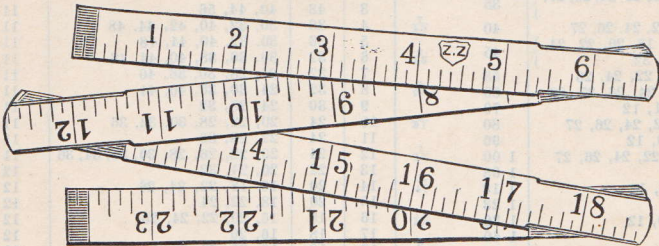


				Each.
No. 69.	1 ft.	$\frac{5}{8}$ in.	wide, plain joint	\$0.08
No. 68.	2 ft. 1	$\frac{5}{8}$ in.	wide, plain joint	.10
No. 61.	2 ft. 1	in.	wide, square brass joint	.15
No. 62.	2 ft. 1	in.	wide, square brass joint, all brass bound	.35
No. 53 $\frac{3}{4}$.	2 ft.	$\frac{3}{4}$ in.	wide, brass arch joint, inside beveled edges, with architect's scale (see cut)	.25
No. 53 $\frac{1}{2}$.	2 ft. 1	in.	wide, brass arch joint, inside beveled edges, with architect's scale	.40
No. 66 $\frac{1}{4}$.	3 ft. 1	in.	wide, arch joint, bound, 8ths and 16ths	.60

IVORY RULES.

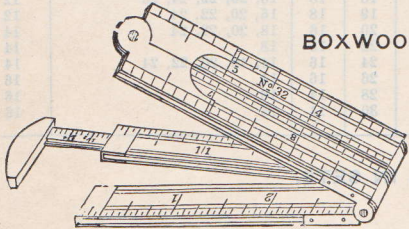
				Each.
No. 90.	1 ft.	$\frac{5}{8}$ in.	wide, round joint, brass middle plates, 8ths and 16ths	\$0.75
No. 88 $\frac{1}{2}$.	1 ft.	$\frac{5}{8}$ in.	wide, arch joint, German silver, edge plates, 8ths and 16ths	1.35
No. 86.	2 ft. 1	in.	wide, square joint, German silver, edge plates, 8ths, 10ths, 12ths, 16ths and 100ths drafting scale	4 00
No. 86 $\frac{1}{2}$.	2 ft. 1	in.	wide, arch joint, German silver, edge plates, 8ths, 10ths, 12ths, 16ths of inches, with inside beveled edges and architects' drafting scales	6.00
No. 87.	2 ft. 1	in.	wide, arch joint, German silver bound, 8ths, 10ths, 12ths and 16ths of inches, drafting scale	5.00

ZIG-ZAG RULES.



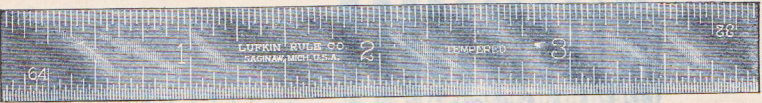
White.	Each.
2-foot	\$0.25
3-foot	.25
4-foot	.30
5-foot	.35
6-foot	.40
8-foot	.50
Yellow.	Each.
2-foot	\$0.15
3-foot	.20
4-foot	.25
5-foot	.30
6-foot	.35
8-foot	.45

BOXWOOD CALIPER RULE, ONE FOOT, FOUR FOLD.



	Each.
No. 32. Square joint, bound, 8ths, 16ths of in., $\frac{1}{8}$ in. wide	\$0.40

MACHINISTS' STEEL RULES.



	Length, inches.	Each.
Flexible and Stiff. Graduated, 32nds and 64ths.	1	\$0.12
Stiff, Heavy, with End Graduated, $\frac{1}{8}$, 16, 32 and 64ths.	2	\$0.20
	3	\$0.28
	4	\$0.36
	6	\$0.52
	9	\$0.80
	12	\$1.00

STEEL RULES IN LEATHER CASES.



	Length, feet.	Price, each.
	1	\$0.10
	3	\$0.65
	6	\$0.75



MACHINISTS' HAND TAPS.

List of Sizes and Prices.

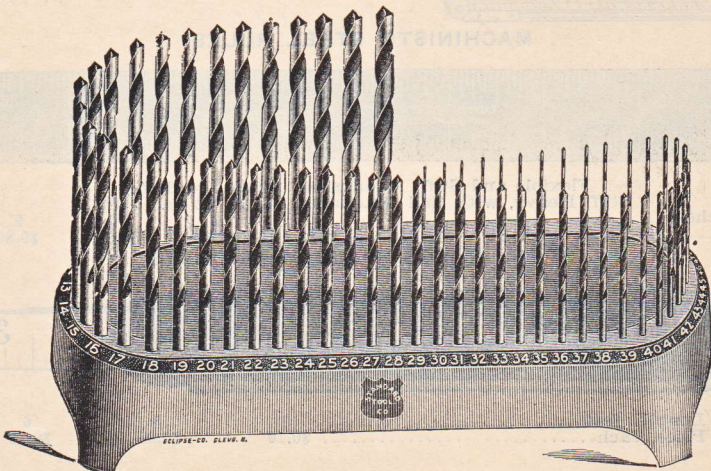
MACHINE SCREW TAPS.



List of Sizes and Prices.

Diameter of Tap, Inches.	No. of Threads to the Inch, Standard Form.	Number of Threads to the Inch.	Each.	Approximate Diameter, Fraction of an Inch.	Screw Gauge Sizes Number.	Standard No. of Threads.	We will also Furnish Number of Threads to Inch.	Prices, Each.
$\frac{1}{16}$	24	24, 32	\$0 18		1	64	56, 60, 72	\$0 11
$\frac{1}{8}$	20	16, 18, 20, 22, 24, 26, 27, 28, 30, 32	23		$1\frac{1}{2}$	56		11
$\frac{1}{4}$	18	16, 18, 20, 22, 24, 26, 27, 28, 30, 32	25		2	56	48, 64	11
$\frac{3}{8}$	16	14, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32	28		3	48	40, 44, 56	11
$\frac{1}{2}$	14	12, 14, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32	30		4	36	30, 32, 40, 42, 44, 48	11
$\frac{5}{8}$	13	12, 13, 14, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32	35		5	36	30, 32, 40, 44, 48	11
$\frac{3}{4}$	12	12, 14, 18, 20, 22, 24, 26, 27	40	$\frac{7}{8}$	6	32	30, 36, 38, 40, 44, 48	11
$\frac{7}{8}$	11	10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32	45	$\frac{9}{8}$	7	32	24, 28, 30, 36, 40	11
$1\frac{1}{8}$	11	10, 11, 12, 20, 22, 24, 26	53	$\frac{3}{2}$	8	32	24, 30, 36, 40, 44	11
$1\frac{1}{4}$	10	10, 11, 12, 20, 22, 24, 26, 27, 28	60		9	30	24, 28, 32	11
$1\frac{1}{2}$	10	9, 10, 11, 12	70	$\frac{5}{4}$	10	24	22, 28, 30, 32, 36	11
$1\frac{3}{4}$	9	9, 10, 12, 20, 22, 24, 26, 27	80		11	24	22, 28, 30	11
$1\frac{7}{8}$	9	8, 9, 10, 12	90	$\frac{3}{2}$	12	24	20, 22, 26, 28, 30, 32, 34, 36	11
2	8	8, 9, 10, 12, 20, 22, 24, 26, 27	1 00	$\frac{1}{4}$	13	22	20, 24, 32	12
$1\frac{1}{8}$	8	8	1 08		14	20	16, 18, 22, 24, 26	12
$1\frac{1}{4}$	7	7, 8, 10, 12	1 13		15	20	18, 22, 24	12
$1\frac{1}{2}$	7	7	1 23	$\frac{1}{4}$	16	18	16, 20, 22, 24, 26	12
$1\frac{3}{4}$	7	7, 8, 10, 12	1 30	$\frac{3}{4}$	17	18	16, 20	12
$1\frac{7}{8}$	7	7	1 40		18	18	16, 20	12
$1\frac{3}{8}$	6	6	1 50	$\frac{3}{2}$	19	18	16, 20, 22, 24, 26	12
$1\frac{1}{2}$	6	6	1 63		20	16	18, 20, 22, 24	12
$1\frac{1}{4}$	6	6	1 75	$\frac{1}{2}$	22	16	18	14
$1\frac{3}{8}$	5	5, 5 $\frac{1}{2}$	2 10		24	16	14, 18, 20, 22, 24	14
$1\frac{1}{2}$	5	5	2 50	$\frac{3}{4}$	26	16	14	14
$1\frac{3}{4}$	5	4 $\frac{1}{2}$, 5	2 90		28	14	16	16
$1\frac{7}{8}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	3 35		30	14	16	16

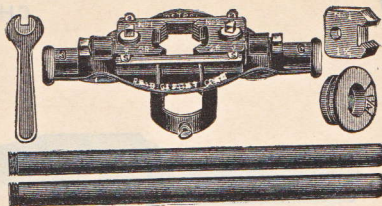
MOUNTED DRILLS IN SETS.



Metal Block furnished with Set No. 8. Drills from 1 to 60. Set.....\$4.00
 Metal Block furnished with Set No. 5. Drills from 1-16 to $\frac{1}{2}$ in. Set..... 4.75

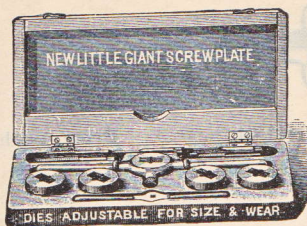
ADJUSTABLE PIPE STOCKS AND DIES.

No.	Threads.	Price.
1.....	$\frac{1}{8}$ to $\frac{1}{2}$	\$3.25
2.....	$\frac{1}{4}$ to 1.....	4.35
2½.....	$\frac{1}{2}$ to $1\frac{1}{4}$	4.75
3.....	$1\frac{1}{4}$ to 2.....	7.25
6.....	2½ to 3.....	15.00
Complete, with Right Hand Dies.		

SCREW PLATES.
WIRE SIZES.

For Jewelers', Dentists', Tool Makers' and Amateurs' Use.

SCREW PLATES.



ASSORTMENT No. A1.

Has Stock, Tap Wrench, Taps, Dies and Collets. Price.

Cuts $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$\$4.50

Diameter of Collets, $1\frac{1}{4}$ inches.

These sets are put up in elegantly finished cases.



ASSORTMENT No. 1.

Has Adjustable Tap Wrench. Stock $14\frac{1}{2}$ inches long. Taps, Dies and Collets. Price.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{13}$\$8.40

Collets, 2 inch diameter.

ASSORTMENT No. 2.

Has Adjustable Tap Wrench. Stock 23 inches long. Taps, Dies and Collets.

Cutting $\frac{1}{4}^{20}$, $\frac{3}{8}^{16}$, $\frac{1}{2}^{13}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$\$9.50

ASSORTMENT No. 5.

Has Adjustable Tap Wrench. Stock 23 inches long. Taps, Dies and Collets.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{13}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$\$11.25

Collets, $2\frac{3}{4}$ inch diameter.

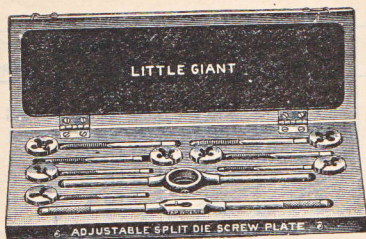
ASSORTMENT No. 9.

Has Adjustable Tap Wrenches. Two Stocks $14\frac{1}{2}$ and 29 inches long. Taps, Dies and Collets.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{13}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^{9}$, 1^{8}\$19.25

Collets of four small sizes are 2 in. diameter. Collets of four larger sizes are $2\frac{3}{4}$ in. diameter.

U. S. Standard form of thread sent unless otherwise specified.

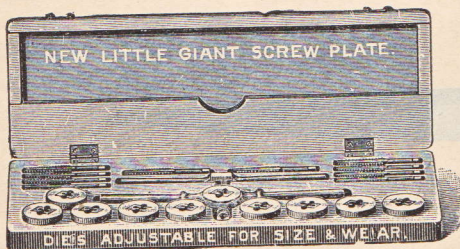


ASSORTMENT No. A2.

Cuts $\frac{3}{16}$, $\frac{1}{8}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$\$5.60

Diameter of Collets, $1\frac{1}{4}$ inches.

The stocks are light and yet of sufficient length to give leverage for cutting the sizes contained in assortments.



ASSORTMENT No. A3.

Cuts $\frac{7}{8}$, $\frac{1}{8}$, $\frac{3}{16}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, $\frac{1}{4}$\$7.85

Diameter of Collets, $1\frac{1}{4}$ inches.

SPLIT DIE SCREW PLATES.

No. D5.

Cutting 4^{36} , 6^{32} , 8^{32} , 10^{24} , 12^{24}\$3.25
5 Taps, 5 Dies, Guides, Stock and Adjustable Tap Wrench.

No. D6.

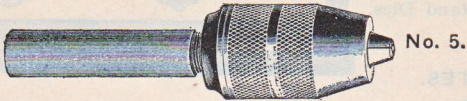
Cutting 4^{36} , 6^{32} , 8^{32} , 10^{24} , 12^{24} , 14^{20}\$3.75
6 Taps, 6 Dies, Guides, Stock and Adjustable Tap Wrench.

No. D7.

Cutting 4^{36} , 6^{32} , 8^{32} , 10^{24} , 12^{24} , 14^{20} , 16^{18}\$4.25
7 Taps, 7 Dies, Guides, Stock and Adjustable Tap Wrench.



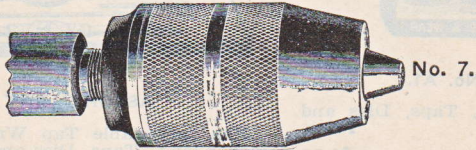
CHUCKS



No. 5 holds from 0 to 3/4 inclusive; has shank 1 1/2 x 1 1/2. Price, each, \$0 90

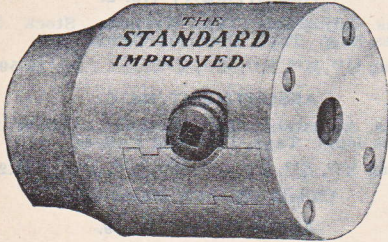


No. 6 holds from 0 to 3/8 inclusive; has shank 3 3/8 x 41-64. Price, each. 1 30



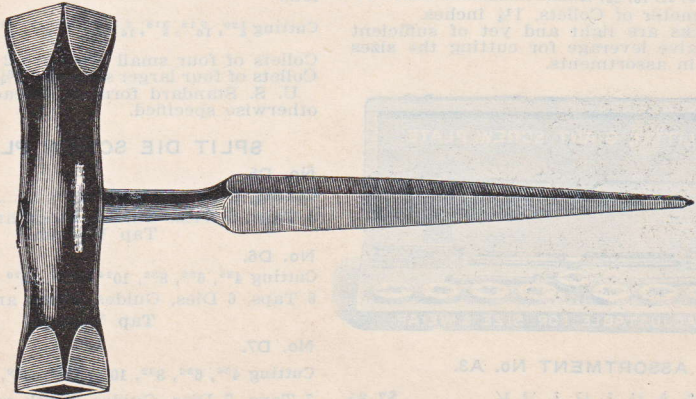
No. 7 holds from 0 to 1/2 inclusive; has shank 4 1/2 x 7/8. Price, each, 1 85

"IMPROVED" DRILL CHUCKS.



Number	Diameter Inches.	Length Inches.	Capacity Inches.	Price Each.
00	1 3/8	2 3/8	0 to 1/4	\$3 50
0	1 1/2	2 1/2	0 to 3/8	4 00
1	2 3/8	2 1/2	0 to 1/2	4 65
2	2 7/8	3 3/8	0 to 3/4	5 00
3	3 1/2	4 1/4	0 to 1	6 00

SOCKET WRENCH AND REAMER

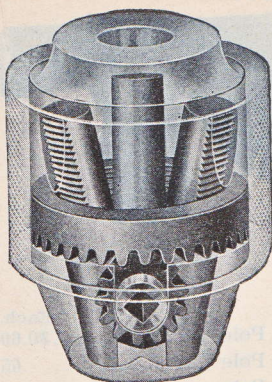


Will turn nuts for 1/4 inch and 5-16 bolts.....each, \$0 65

CHUCKS.



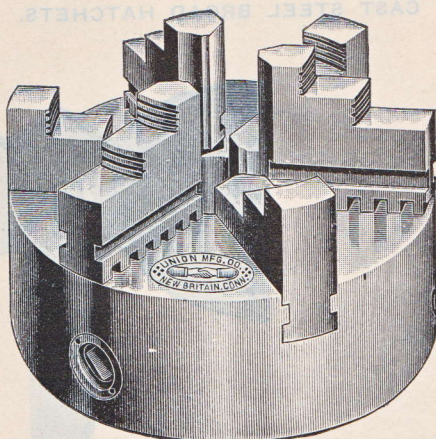
GEARED DRILL CHUCK.



An inclosed Pinion Drill Chuck, in which the jaws are operated by a wrench. Complete, with key wrench.

Each.

No. 1.	0 to 3-16 inch.....	\$4.50
No. 2.	0 to 5-16 inch.....	5.00
No. 3.	0 to 1/2 inch.....	7.50



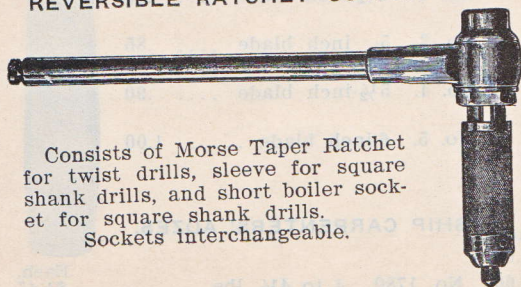
GEARED SCROLL CHUCK.

With Solid Iron Shell.

Dia.	One Set Jaws	Two Sets
	Each.	Each.
2 1/2 inches	\$5.65	\$6.75
3 inches	7.50	9.00
4 inches	9.00	10.80
5 inches	11.25	13.50
6 inches	13.50	16.20
7 1/2 inches	15.00	18.00
9 inches	18.00	21.60
10 1/2 inches	20.25	24.30
12 inches	22.50	27.00

Two sets jaws (inside and outside).

REVERSIBLE RATCHET COMBINATION.



Consists of Morse Taper Ratchet for twist drills, sleeve for square shank drills, and short boiler socket for square shank drills.

Sockets interchangeable.

- No. 1. combination, complete with 10-in. handle.....\$6.50
- No. 2 combination, complete with 14-in. handle..... 7.50
- No. 3 combination, complete with 16-in. handle..... 8.50

The bore of socket for 10-inch ratchet is No. 2 taper, taking drills up to 29-32 of an inch.

The bore of socket for 14 and 16-inch ratchet is No. 3 taper, taking drills up to 1 1/4 inches.

The socket for 10-inch ratchet takes No. 1 Morse taper sleeve.

The socket for 14 and 16-inch ratchet takes No. 2 Morse taper sleeve.



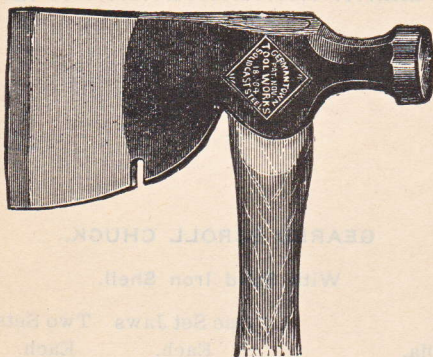
CAST STEEL HALF HATCHETS.

	Each.
No. 1.....	\$0.50
No. 2.....	.55
No. 3.....	.65



GERMANTOWN

SOLID CAST STEEL HALF HATCHETS.

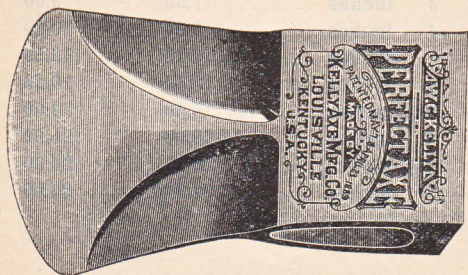


	Each.
No. 1. Regular Pole	\$0.60
No. 2. Regular Pole .....	.65
No. 3. Regular Pole .....	.70
No. 1. Octagon Pole .....	.75
No. 2. Octagon Pole .....	.75
No. 3. Octagon Pole .....	.80

CAST STEEL BROAD HATCHETS.

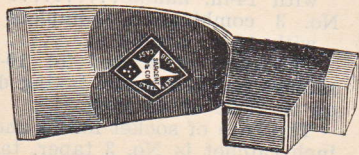


SOLID STEEL AXES.



	Each.
Solid steel Axes, "Columbian"	
polished	\$1.40
Perfection	1.25
Steel Axes	1.00

CARPENTERS' ADZES.



	Each.
No. 1740. 3½ to 4½ lbs., Half Head..	\$1.60
No. 1750. 3½ to 4½ lbs., Full Head..	1.60
(See cut.)	

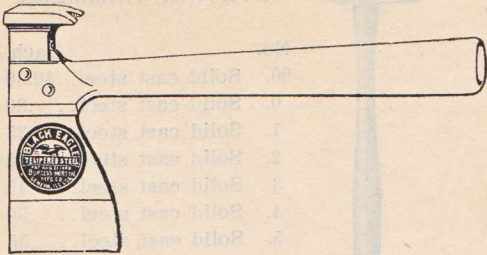
BROAD HATCHETS.

No. 1. 4-inch blade	\$0.75
No. 2. 4½-inch blade .....	.80
No. 3. 5-inch blade .....	.85
No. 4. 5½-inch blade .....	.90
No. 5. 6-inch blade	1.00

SHIP CARPENTERS' ADZES.

	Each.
No. 1780. 4 to 4½ lbs.....	\$1.45
No. 1781. 4 to 4½ lbs., with lip....	1.90

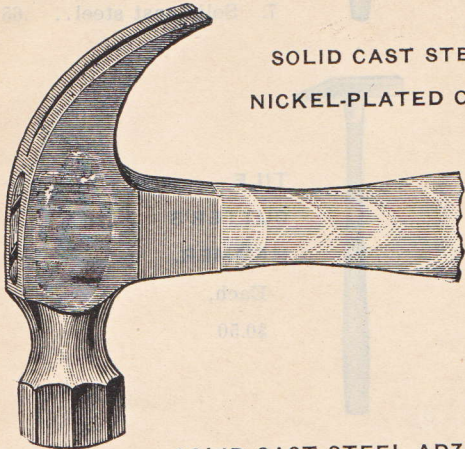
HALF STRAP CLAW HEAD HATCHETS.



Solid wrought steel. No breaking of handles.

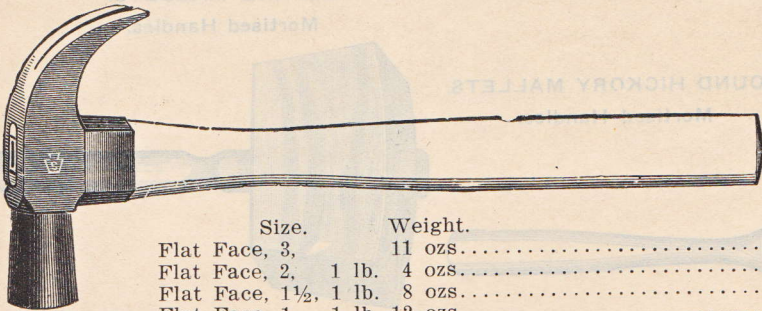
Each\$0.40

SOLID CAST STEEL ADZE EYE,
NICKEL-PLATED CLAW HAMMERS.



No.	1½	2	3
Each	\$0.90	\$0.85	\$0.80

SOLID CAST STEEL ADZE EYE CLAW HAMMERS.



	Size.	Weight.	Each.
	Flat Face, 3,	11 ozs.....	\$0.45
	Flat Face, 2, 1 lb.	4 ozs.....	.50
	Flat Face, 1½, 1 lb.	8 ozs.....	.55
	Flat Face, 1, 1 lb.	12 ozs.....	.60

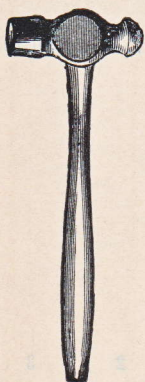
ADZE EYE NAIL HAMMERS, BELL FACE.



No.	1	1½	2	3
Each	\$0.60	\$0.55	\$0.50	\$0.45



BALL PEIN HAMMERS.

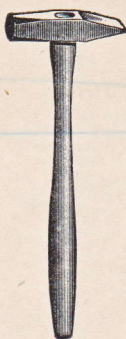


No.	Weight.	Each.
6.	4-oz.....	\$0.50
7.	6-oz.....	.50
8.	8-oz.....	.50
9.	12-oz.....	.50
10.	1-lb.....	.55
11.	1-lb. 4-oz.....	.55
12.	1-lb. 8-oz.....	.60
13.	1-lb. 12-oz.....	.65
14.	2-lb.....	.70
15.	2-lb. 4-oz.....	.75
16.	2-lb. 8-oz.....	.80
17.	2-lb. 12-oz.....	.85
18.	3-lb.....	.90

JEWELERS' HAMMERS.

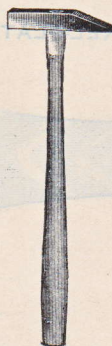
Ball or Cross Pein.

No.	Weight.	Each.
A.	1½-oz.....	\$0.50
B.	3-oz.....	.60
C.	6-oz.....	.65



RIVETING HAMMERS.

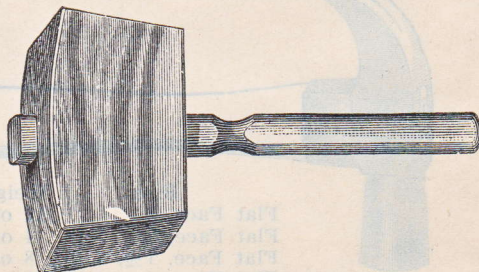
No.	Each.
00.	Solid cast steel..\$0.30
0.	Solid cast steel.. .30
1.	Solid cast steel.. .35
2.	Solid cast steel.. .40
3.	Solid cast steel.. .45
4.	Solid cast steel.. .50
5.	Solid cast steel.. .55
6.	Solid cast steel.. .60
7.	Solid cast steel.. .65



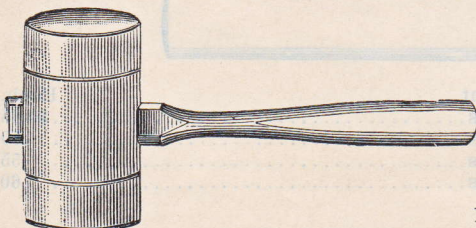
TILE CUTTER'S HAMMER.

Each,
\$0.50

SQUARE MALLETS. Mortised Handles.



ROUND HICKORY MALLETS. Mortised Handles.

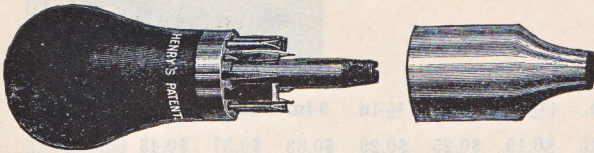


No. 1.	5 inches long, 3 inches diameter. Price.....	\$0.12
No. 2.	5½ inches long, 3½ inches diameter. Price.....	.20
No. 3.	6 inches long, 3 inches diameter. Price.....	.25

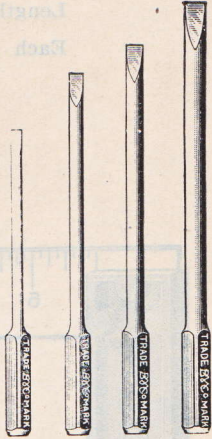
Square Hickory, Mortised Handles.

No. 8.	6 inches long. Price.....	\$0.20
No. 9.	6½ inches long. Price.....	.25
No. 10.	7 inches long. Price.....	.30
Square Lignum Vitae.		
No. 11.	6 inches long. Price.....	.36
No. 12.	6½ inches long. Price.....	.40
No. 13.	7 inches long. Price.....	.50

COMBINATION TOOL HANDLE.



Contains twelve tools, arranged in such manner that the one wanted for use can be readily selected, and held firmly when in use by the cap which screws down on the spring jaws. Priceeach 65c

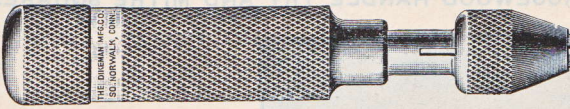


MAGAZINE BRAD AWL HANDLE.



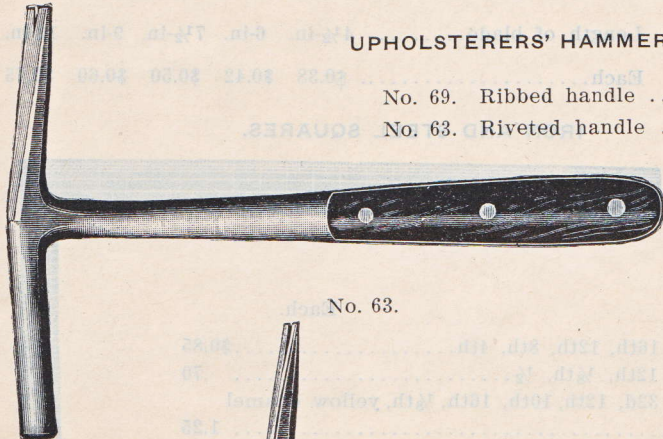
Maple Handle. Cannot turn; cannot pull out..... each 40c

METAL HANDLE TOOL SET.



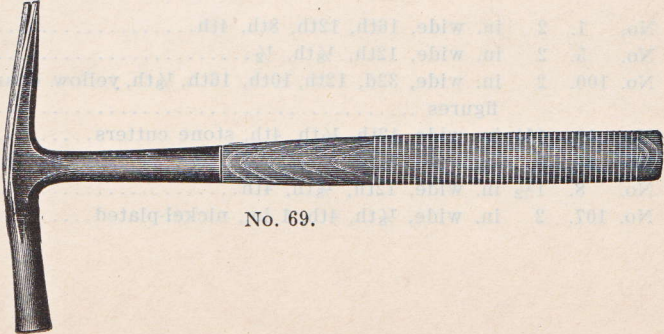
- No. 0. Small, with knuckled handle, nickel-plated.....\$0.75
- No. 5. Large, with knuckled handle, nickel-plated..... 1.25

UPHOLSTERERS' HAMMERS.



- No. 69. Ribbed handleeach \$0.50
- No. 63. Riveted handleeach 1.25

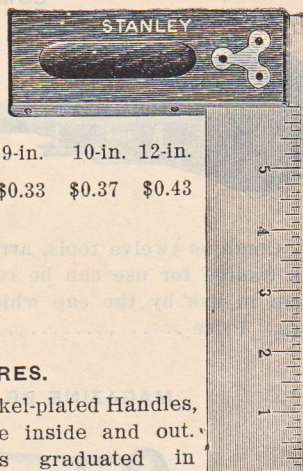
No. 63.



No. 69.

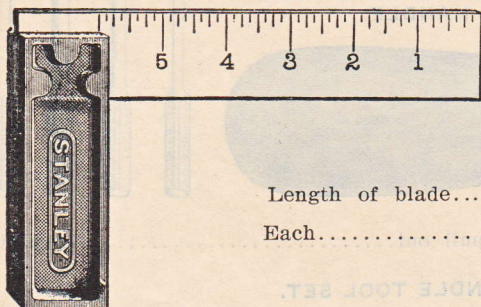


TRY SQUARES. Rosewood Handle.



Length blade, 3-in.	4½-in.	6-in.	7½-in.	9-in.	10-in.	12-in.	
Each	\$0.15	\$0.19	\$0.25	\$0.29	\$0.33	\$0.37	\$0.43

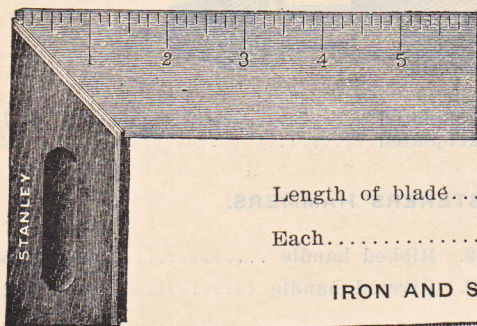
IRON HANDLE TRY SQUARES.



Nickel-plated Handles,
square inside and out.
Blades graduated in
inches.

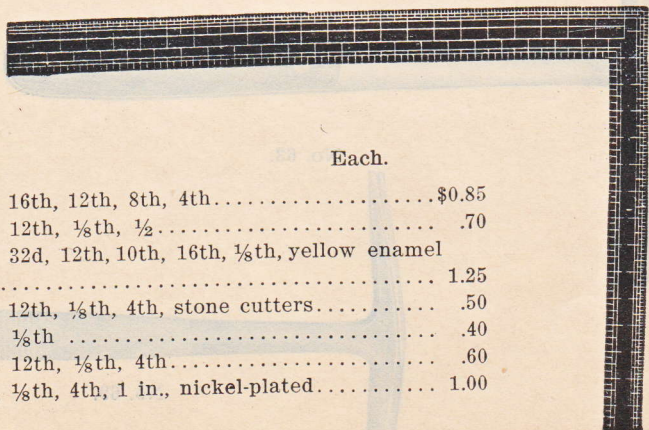
Length of blade...	2-in.	4-in.	6-in.	8-in.	10-in.	12-in.
Each.....	\$0.20	\$0.22	\$0.28	\$0.35	\$0.45	\$0.50

ROSEWOOD HANDLE TRY AND MITRE SQUARE.



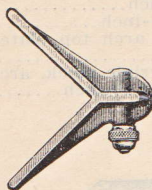
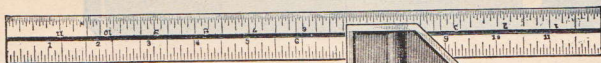
Length of blade.....	4½-in.	6-in.	7½-in.	9-in.	12-in.
Each.....	\$0.38	\$0.42	\$0.50	\$0.60	\$0.75

IRON AND STEEL SQUARES.



No.	1.	2	in. wide, 16th, 12th, 8th, 4th.....	\$0.85
No.	5.	2	in. wide, 12th, ⅛th, ½.....	.70
No.	100.	2	in. wide, 32d, 12th, 10th, 16th, ⅛th, yellow enamel figures	1.25
No.	10.	1½	in. wide, 12th, ⅛th, 4th, stone cutters.....	.50
No.	24.	2	in. wide, ⅛th .....	.40
No.	8.	1½	in. wide, 12th, ⅛th, 4th.....	.60
No.	107.	2	in. wide, ⅛th, 4th, 1 in., nickel-plated.....	1.00

COMBINATION SQUARE.



SET COMPLETE.

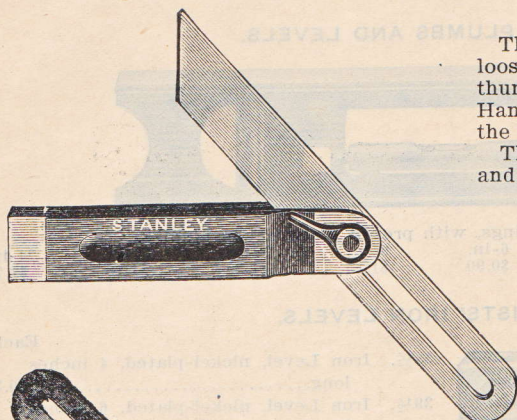
Price, 6 inch.....	\$1.00
Price, 9 inch.....	1.25
Price, 12 inch.....	1.50

A set complete comprises a Mitre Head, Centre Head and Blade, as shown in above cut, one blade fitting both heads.

MITRE HEAD AND BLADE ONLY

Price, 6 inch.....	\$0.75
Price, 9 inch.....	.85
Price, 12 inch.....	1.00

SLIDING T BEVELS.

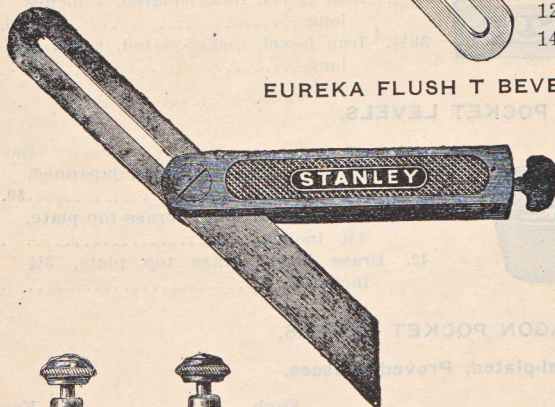


The Bevel Blade can be made fast or loose by moving the Lever with the thumb of the hand which grasps the Handle, thus leaving the other hand of the workman free.

These Bevels have Rosewood Handles and Brass Levers (flush).

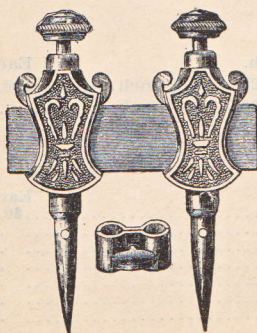
	Each.
6-inch	\$0.25
8-inch .....	.30
10-inch .....	.35
12-inch .....	.40
14-inch .....	.45

EUREKA FLUSH T BEVELS.



These Bevels have Nickel-plated Metallic Handles. The Blade is easily secured at any angle by turning the Thumb Screw at the lower end of the Handle.

	Each.
6-inch	\$0.45
8-inch .....	.50
10-inch .....	.60



IMPROVED TRAMMEL POINTS.

	Each.
No. 1. Small bronze metal steel points.....	\$0.85
No. 2. Medium bronze metal steel points.....	1.00
No. 3. Large bronze metal steel points.....	1.45



PLUMBS AND LEVELS.



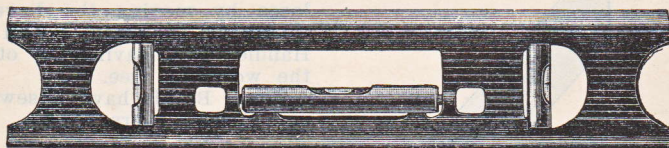
No. 102.	Polished Level, two side views, assorted, from 10- to 16-inch.....	Each. \$0.35
No. 134.	Plumb and Level, brass-lipped side views, tipped, 12- to 18-inch.....	.90
No. 3.	Patent Adjustable, polished mahogany Plumb and Level, arch top plate, two brass-lipped side views, assorted, from 26- to 30-inch.....	.85
No. 5.	Patent Adjustable, polished and tipped Plumb and Level, triple stock, arch top plate, two brass-lipped side views, assorted, from 26- to 30-inch.....	1.35

DUPLEX LEVELS.



No. 30.	Adjustable, polished and tipped, hardwood Plumb and Level, 24- to 30-inch.....	Each. \$1.25
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METALLIC PLUMBS AND LEVELS.



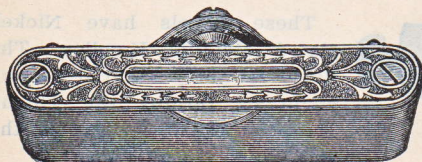
No. 36.	Japanned, nickel-plated trimmings, with proved glasses, two plumbs.	
Sizes.....	6-in. 9-in. 12-in. 18-in. 24-in.	
Each.....	\$0.90 \$1.15 \$1.35 \$1.50 \$1.75	

MACHINISTS' IRON LEVELS.



38½.	Iron Level, nickel-plated, 4 inches long.....	Each. \$0.35
39½.	Iron Level, nickel-plated, 6 inches long.....	.45

POCKET LEVELS.



40.	Iron body, Iron top plate, japanned, 3¼ inches.....	Each. \$0.10
41.	Iron body, japanned, brass top plate, 3¼ inches.....	.12
42.	Brass body, brass top plate, 3¼ inches.....	.35

HEXAGON POCKET LEVELS.

Nickel-plated, Proved Glasses.



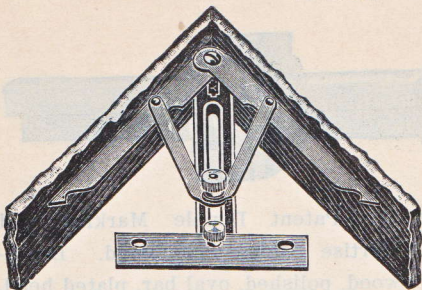
2- inch.....	Each. \$0.25	3½-inch.....	Each. \$0.40
2½-inch.....	.30	4- inch.....	.50
3- inch.....	.35		

PROVED LEVEL GLASSES.



1- to 1¼-inch.....	Each. \$0.05
2- inch.....	.05
2½-inch.....	.06
3- inch.....	.06
3½-inch.....	.07
4- inch.....	.08
4½-inch.....	.10

ANGLE DIVIDER.



With this tool any angle can be found and bisected, fitting moulding or other wood work to odd angles can be done with ease and certainty. It is also graduated for the parts of circle commonly used. A handy tool for laying out work.

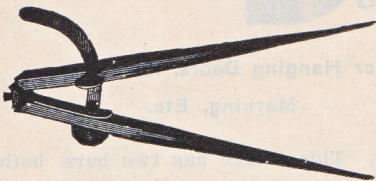
Price, each, \$1.25.

COMPASSES.



3-inch	each \$0.11
4-inch .....	.. .12
5-inch .....	.. .13
6-inch .....	.. .15
7-inch .....	.. .18
8-inch .....	.. .25
9-inch .....	.. .45
10-inch .....	.. .50

WING DIVIDERS.



5-inch	each \$0.18
6-inch .....	.. .20
7-inch .....	.. .22
8-inch .....	.. .25
9-inch .....	.. .30
10-inch .....	.. .32
12-inch .....	.. .40
15-inch .....	.. .60
18-inch .....	.. .80

OUTSIDE CALIPERS.



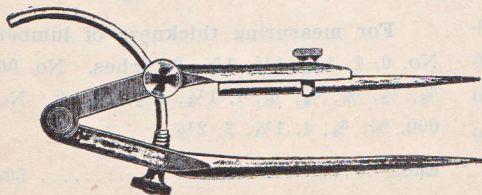
3- inch	each \$0.12
3½-inch .....	.. .12
4- inch .....	.. .14
5- inch .....	.. .16
6- inch .....	.. .18
7- inch .....	.. .20
8- inch .....	.. .25

INSIDE CALIPERS.



2½-inch	each \$0.12
3- inch .....	.. .12
4- inch .....	.. .14
5- inch .....	.. .16
6- inch .....	.. .18
7- inch .....	.. .20
8- inch .....	.. .25

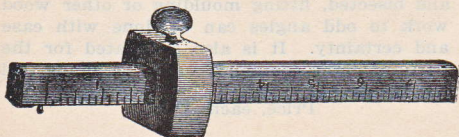
EXTENSION DIVIDERS.



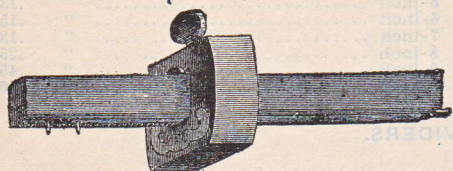
	Each
6-inch	\$0.60
8-inch .....	.65
10-inch .....	.75



MARKING GAUGES.

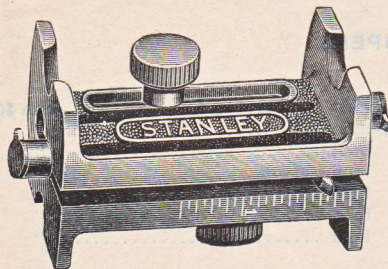


No. 61. Beechwood, Boxwood thumb screw. Each 10c



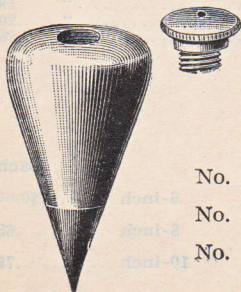
No. 64. Beechwood, Boxwood thumb screw, polished, plated head, each 20c

IMPROVED BUTT GAUGE.



No. 95. Nickel-plated. Each..... 65c

POLISHED CAST BRASS PLUMB BOBS.



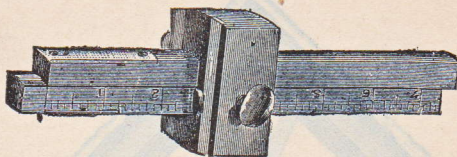
Each.

No. 5. 6- ounce. \$0.30

No. 6. 11½-ounce. .40

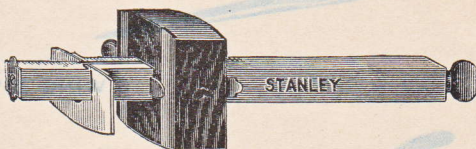
No. 8. 16- ounce. .50

MORTISE GAUGE.



No. 71. Patent Double Marking and Mortise Gauge combined. Beechwood, polished, oval bar, plated head, brass thumb screw. Each..... 45c

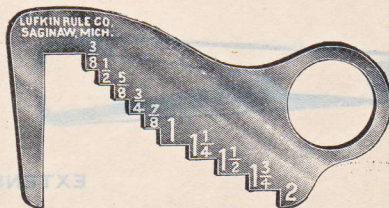
BUTT AND RABBET GAUGE.



For Hanging Doors, Mortising, Marking, Etc.

No. 92. This Gauge has two bars, both of brass, one movable within the other. The two steel blades or markers at the extreme end of the inner bar can be moved to any position by means of thumb screw at opposite end of gauge. Price, each.....\$1.10

LUMBER GAUGES.

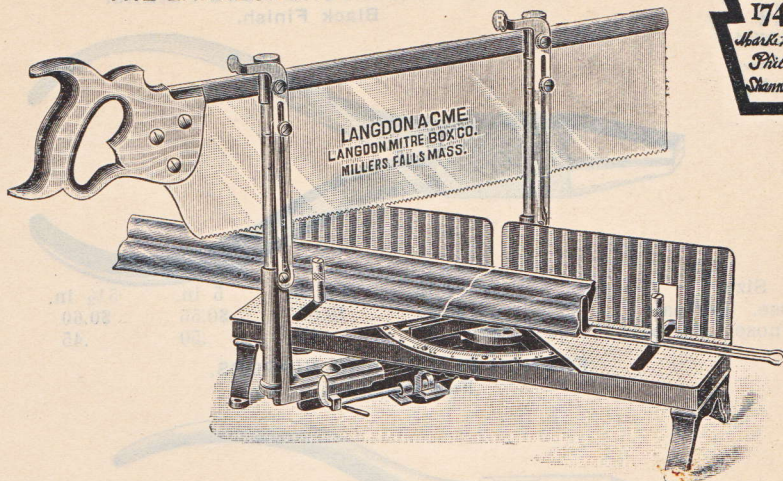


For measuring thickness of lumber.

No. 0, 1, 1¼, 1½, 1¾, 2 inches. No. 00, ¾, ½, ⅝, ⅜, 7/8, 1, 1¼, 1½, 1¾, 2. No. 000, ⅝, ¾, 1, 1¼, 2, 2½.

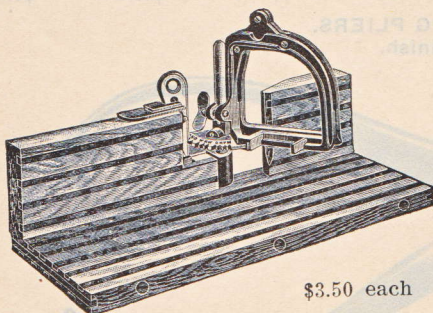
Each 50c

THE LANGDON ACME MITRE BOX.



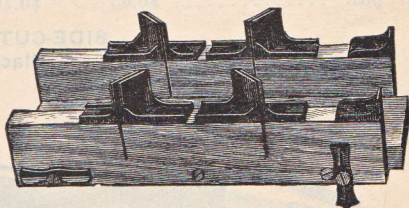
			Capacity at Right Angles.	Capacity at Mitre.	Each, includ- ing Saw.
No. 68.	Size 1.	Saw 22 x 4.	7 1/2	5	\$8.50
No. 69.	Size 1.	Saw 22 x 4.	7 1/2	5	8.90
No. 70.	Size 1.	Saw 26 x 4.	7 1/2	5	9.25
No. 71.	Size 2.	Saw 22 x 4.	10 1/4	7	9.25
No. 72.	Size 2.	Saw 24 x 4.	10 1/4	7	9.75
No. 73.	Size 2.	Saw 26 x 4.	10 1/4	7	10.20
No. 74.	Size 2 1/2.	Saw 28 x 5.	10 1/4	7	11.90
No. 75.	Size 2 1/2.	Saw 30 x 5.	10 1/4	7	12.35

THE PERFECTION MITRE BOX.



\$3.50 each

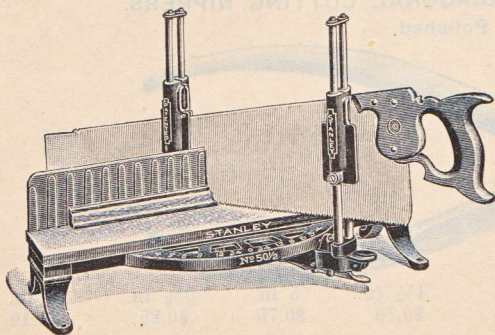
OLMSTEAD'S PATENT MITRE BOX.



Cut of Nos. 3 and 4.

- No. 1. Without guides for square cut. Will take moulding 1 1/2 x 3-inch, each. \$1.00
 No. 2. Same as No. 1, but larger. Will take moulding 2 1/2 x 4-inch, each. 1.50
 No. 3. Has guides for square cut. Will take moulding 1 1/2 x 3-inch, each. 1.25
 No. 4. Has guides for square cut. Will take moulding 2 1/2 x 4-inch, each. 1.75

IMPROVED MITRE BOX.



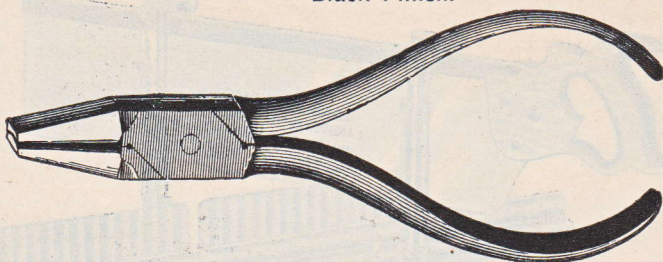
This Mitre Box can be used with a back saw or a panel saw equally well. If a back saw is used, both links which connect the rollers, or guides, are left in the upper grooves, and the back of the saw is passed through under the links.

If a panel saw is used, the link which connects the rollers on the back spindle is changed to the lower groove and then the blade of the saw will be stiffly supported by both sets of rollers, and work like a back saw.

Moulding of any size up to 4 inches, can be cut in this Box.
 Without saweach \$5.00

**FLAT AND ROUND NOSE PLIERS.**

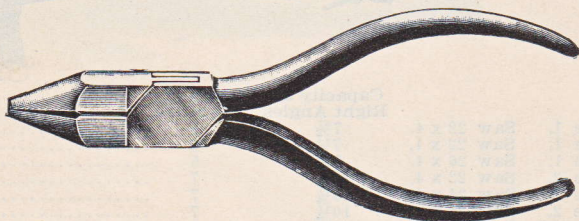
Black Finish.



Size.	4 in.	4½ in.	5 in.	5½ in.	6 in.
Flat nose. Per pair	\$0.35	\$0.50	\$0.55	\$0.60	\$0.65
Round nose. Per pair .....	.35	.45	.50	.45	.55

FRENCH PLIERS AND NIPPERS.

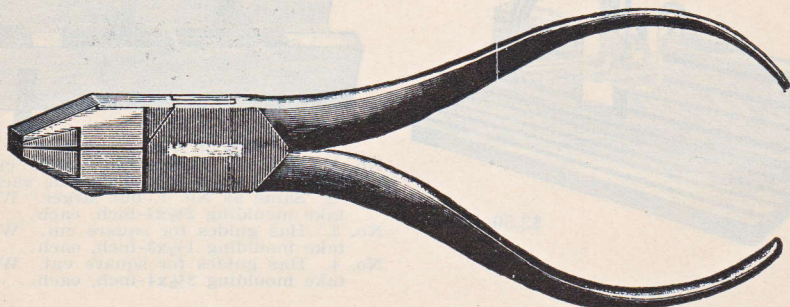
Full Polished.



Size.	3½ in.	4 in.	4½ in.	5 in.	5½ in.	6 in.
Per pair	\$0.65	\$0.70	\$0.75	\$0.80	\$0.95	\$1.00

MILLINERS' PLIERS.**SIDE-CUTTING PLIERS.**

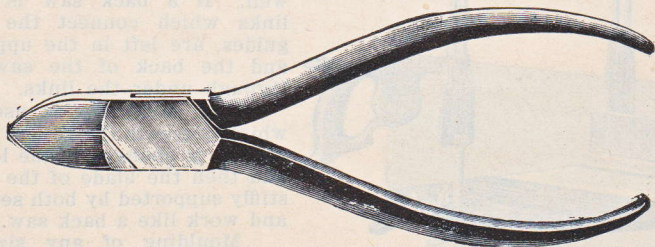
Black Finish.



Size.	4½ in.	5 in.	5½ in.	6 in.	6½ in.	8 in.
Price, per pair	\$0.65	\$0.70	\$0.75	\$0.85	\$0.95	\$1.40

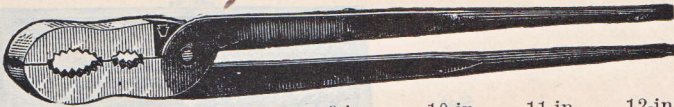
FRENCH ELECTRICIANS' DIAGONAL CUTTING NIPPERS.

Full Polished.



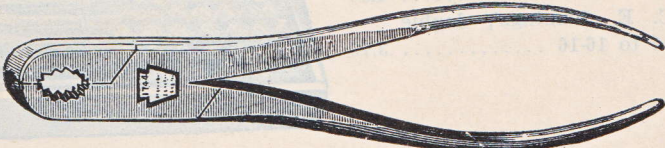
Size.	3½ in.	4 in.	4½ in.	5 in.	5½ in.	6 in.
Per pair	\$0.55	\$0.55	\$0.70	\$0.75	\$0.85	\$1.10

BLACK HANDLE PLUMBERS' PLIERS.



Length, inches	8-in.	9-in.	10-in.	11-in.	12-in.	13-in.	14-in.
Each	\$0.70	\$0.80	\$0.90	\$0.95	\$1.10	\$1.30	\$1.40

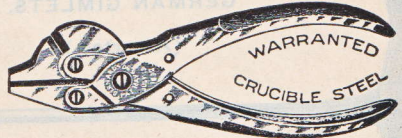
GAS AND BURNER PLIERS.



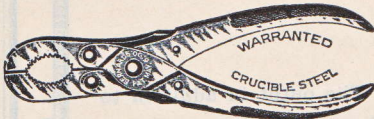
Length, inches	4-in.	5-in.	6-in.	7-in.	8-in.
Each	\$0.40	\$0.45	\$0.50	\$0.60	\$0.75

BERNARD'S CUTTING PLIERS.

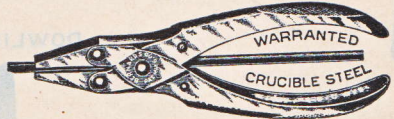
Length, inches..	4½	5½	6½	7½
Each	\$0.75	\$0.90	\$1.00	\$1.50



BERNARD'S PARALLEL GAS PLIERS.



BERNARD'S PARALLEL PLIERS.

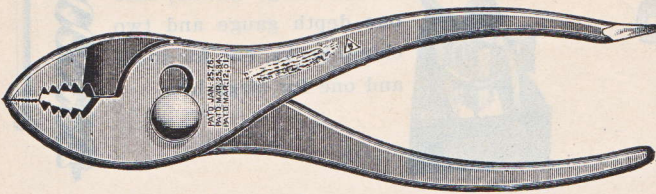


Length, inches.....	5	6	7
Each	\$0.50	\$0.65	\$0.75

Flat Nose Plier.

Length, inches..	4½	5½	6½	7½
Each	\$0.45	\$0.60	\$0.75	\$0.95

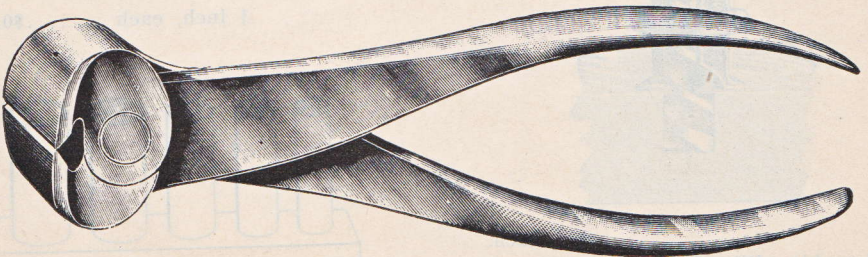
IMPROVED COMBINATION PLIERS.



Nickel-plated.

Each..... 75c

POWERFUL DOUBLE JOINTED END CUTTING NIPPERS.

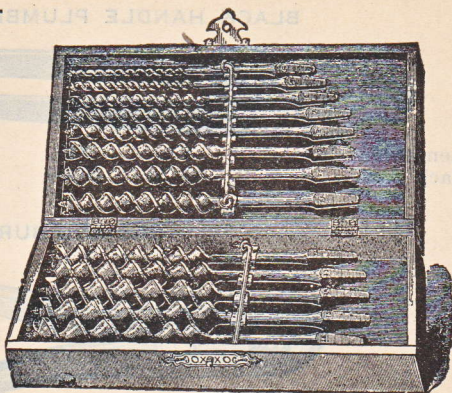


5½ inches, designed for very heavy work. Each..... 60c



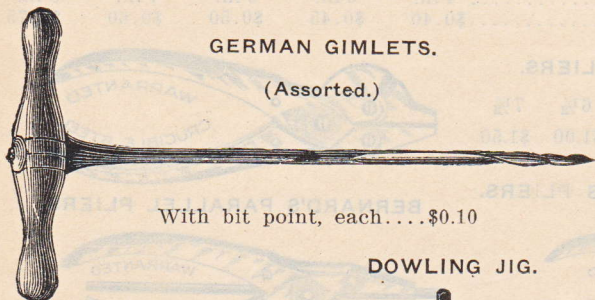
AUGER BITS, IN CASES.

	Set.
Pugh's or Arrow Brand, 4-16 to 16-16.	\$7.50
Russell Jennings', 4-16 to 16-16.	5.00
C. E. Jennings', with extension lip, 4-16 to 16-16	4.50
No. 130. C. E. Jennings', double spur, 4-16 to 16-16	3.75



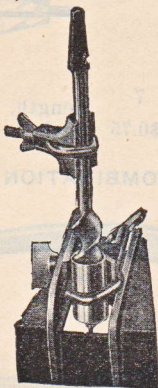
GERMAN GIMLETS.

(Assorted.)

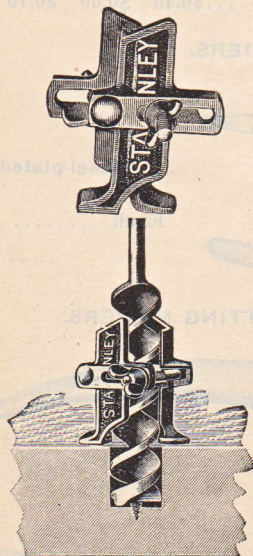


With bit point, each....\$0.10

DOWLING JIG.



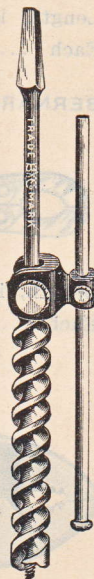
ADJUSTABLE BIT GAUGE.



Each.

Adjustable Bit Gauge, nickel-plated, 2½ in. long\$0.60

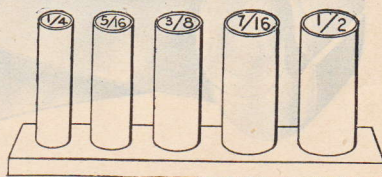
BIT GAUGES.



The outfit in addition to Jig are five different sized guides consisting of ¼, ⅜, ½, ⅝, ¾ and two clamp hooks, one for small and one for large guides, also one depth gauge and two clamp hooks, one for small and one for large bits.

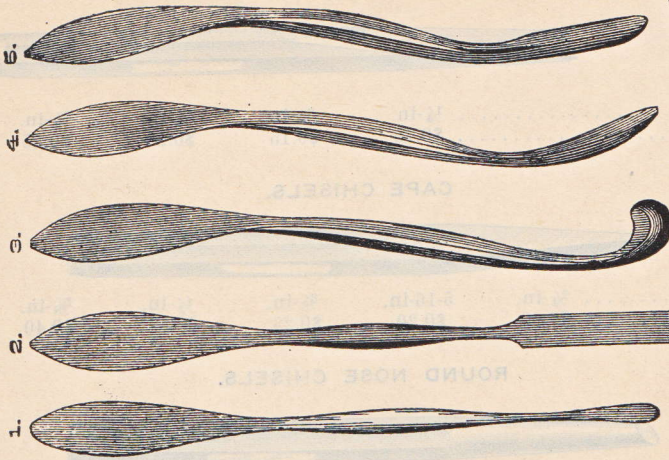
Japanned, Polished Rods.

No. 1. For bits up to
1 inch, each\$0.35



GUIDES.

MITRING TOOLS.



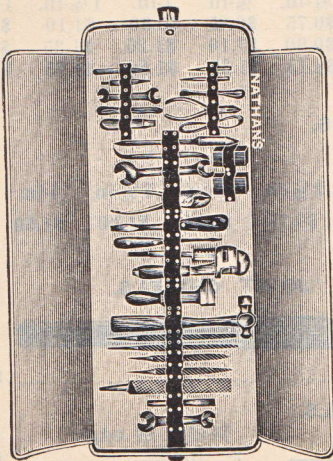
Mitring tools, assorted Each. \$0.50

MITRING RULES.



Size, 3 1/4 inches, price, per inch....\$0.06 | Size, 4 inches, price, per inch.....\$0.07

TOOL ROLLS.



TOOL BAGS.



Rolls only tools extra.
No. 3. Heavy duck, each.....\$2.00
No. 10. Heavy duck, each..... 1.50

Made of extra heavy duck. Length
18 inches, each.....\$2.00



COLD CHISELS.



Sizes	1/4-in.	3/8-in.	1/2-in.	5/8-in.	3/4-in.
Each	\$0.15	\$0.15	\$0.20	\$0.25	\$0.30

CAPE CHISELS.



Sizes	1/4-in.	5-16-in.	3/8-in.	1/2-in.	5/8-in.	3/4-in.
Each	\$0.20	\$0.20	\$0.25	\$0.30	\$0.40	\$0.50

ROUND NOSE CHISELS.



Sizes	1/4-in.	5-16-in.	3/8-in.	1/2-in.	5/8-in.	3/4 in.
Each	\$0.25	\$0.25	\$0.30	\$0.35	\$0.45	\$0.55

DIAMOND POINT CHISELS.



Sizes	1/4-in.	5-16-in.	3/8-in.	1/2-in.	5/8-in.	3/4-in.
Each	\$0.25	\$0.25	\$0.30	\$0.35	\$0.45	\$0.55

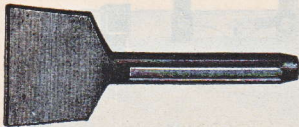
STAR DRILLS.

For Brick, Concrete or Stone.



	3/8-in.	7-16-in.	1/2-in.	5/8-in.	3/4-in.	7/8-in.	1-in.	1 1/8-in.	1 1/4-in.
12 inches long, each	\$0.45	\$0.48	\$0.50	\$0.60	\$0.75	\$0.85	\$0.90	\$1.10	\$1.25
18 inches long, each			\$0.70	\$0.75	\$0.90	\$1.10	\$1.25	\$1.35	\$1.50
24 inches long, each			\$0.75	\$0.90	\$1.15	\$1.35	\$1.50	\$1.75	\$1.90

FRONT CHISELS.



Width of Face....	2 1/2-in.	3-in.	3 1/2-in.	4-in.
Each	\$0.75	\$0.85	\$1.00	\$1.50

BRICK CHISELS.



Each	\$0.35
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JOINT CHISELS.



Each	\$0.35
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FLOORING CHISELS.



12 inches long.

Width of edge.	each
2- inch.....	\$0.65
2 1/2-inch.....	.85
3- inch.....	1.15
3 1/2-inch.....	1.25

SPECIAL FLOOR CHISELS.

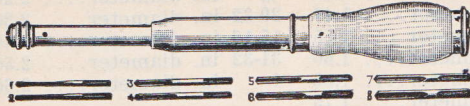
18 inches long, made thin to cut flooring, each.....	\$1.25
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“YANKEE” AUTOMATIC DRILL, No. 41.



Complete, with set drills (8).....each \$1.25
Extra drills, set (8), with chuck.....each .50

AUTOMATIC DRILLS.



With wood handle, metal head. The drill points are contained in the handle, each in separate compartment.
Complete, each\$1.50
Extra drill points, set (8)..... .40



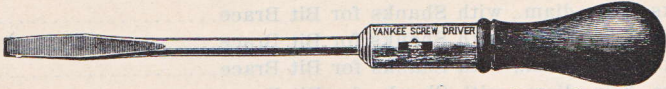
With cocobola handle. Drill points packed in tin box.
Each\$1.25
Extra drill points, set..... .40

YANKEE RATCHET SCREW DRIVERS.



No. 30. Right and left hand, with 3 bits.....each \$1.25
No. 31. Same design as No. 30, but heavier.....each 1.65

YANKEE RATCHET SCREW DRIVERS, No. 10.



Length of blade, 2 inches. .each \$0.30	Length of blade, 5 inches...each .55
Length of blade, 3 inches...each .40	Length of blade, 6 inches. .each .65
Length of blade, 4 inches. .each .50	Length of blade, 8 inches...each .75

YANKEE SCREW DRIVER, WITH SCREW HOLDER ATTACHMENT.



Length of blade, 3 inches.....each \$0.65	
Length of blade, 4 inches.....each .75	
Length of blade, 5 inches.....each .85	
Length of blade, 6 inches.....each .95	
Length of blade, 8 inches.....each 1.10	

CHAMPION SCREW DRIVER.



2½ inches .....each \$0.18	7 inches .....each .40
3 inches .....each .20	8 inches .....each .45
4 inches .....each .25	10 inches .....each .55
5 inches .....each .30	12 inches .....each .70
6 inches .....each .35	

Countersink, for Yankee Spiral Driver.



Each\$0.12

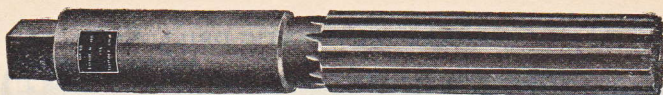
YANKEE BIT, WITH SCREW HOLDER.



A longer bit than regular, with holder made for 30, 31, 35 and 20 screw driver.
Made in 3 sizes, 1, 2, 3.....each \$0.30



STANDARD HAND REAMERS.



Each.		Each.		Each.	
1/8 in. diameter....	\$0.70	7-16 in. diameter....	\$1.25	3/4 in. diameter....	\$1.85
5-32 in. diameter....	.70	15-32 in. diameter....	1.30	25-32 in. diameter....	1.90
3-16 in. diameter....	.84	1/2 in. diameter....	1.35	13-16 in. diameter....	1.95
7-32 in. diameter....	.90	17-32 in. diameter....	1.37	27-32 in. diameter....	2.10
1/4 in. diameter....	.98	9-16 in. diameter....	1.40	7/8 in. diameter....	2.20
9-32 in. diameter....	1.02	19-32 in. diameter....	1.47	29-32 in. diameter....	2.30
5-16 in. diameter....	1.05	5/8 in. diameter....	1.55	15-16 in. diameter....	2.40
11-32 in. diameter....	1.08	21-32 in. diameter....	1.60	31-32 in. diameter....	2.50
3/8 in. diameter....	1.12	11-16 in. diameter....	1.68	1 in. diameter....	2.60
13-32 in. diameter....	1.20	23-32 in. diameter....	1.75		

COUNTERSINKS FOR METAL.



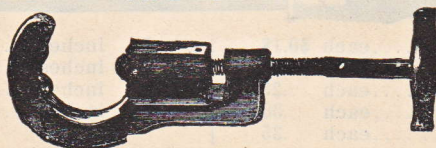
	Each.
Countersinks 5/8 in. diam., with 1/2 or 41-64 Shank.....	\$0.35
Countersinks 3/4 in. diam., with 1/2 or 41-64 Shank.....	.50
Countersinks 7/8 in. diam., with 1/2 or 41-64 Shank.....	.65
Countersinks 1 in. diam., with 1/2 or 41-64 Shank.....	.85
Countersinks 5/8 in. diam., with Shanks for Bit Brace.....	.35
Countersinks 3/4 in. diam., with Shanks for Bit Brace.....	.50
Countersinks 7/8 in. diam., with Shanks for Bit Brace.....	.65
Countersinks 1 in. diam., with Shanks for Bit Brace.....	.85

ROUND PUNCHES.



No. 0 to 10, polished steel	each	\$0.25
No. 11 to 12, polished steel	each	.30
No. 13 to 14, polished steel	each	.45
No. 15 to 16, polished steel	each	.50

PIPE CUTTERS.



Number	1	2	3	4	5	6	7
Cuts Pipe .....inches	1/8 to 1	1/2 to 2	1 1/2 to 3	2 1/2 to 4	4 to 6	6 to 8	9 to 12
Each	\$1.35	\$1.75	\$3.00	\$6.00	\$9.00	\$12.00	\$15.00
Extra Wheels ....each	.25	.30	.40	.50	.75	.75	.75
Extra Pins .....each	.10	.10	.12	.20	.20	.20	.20

KNURLED CUP POINT NAIL SETS.



These sets are knurled or milled as shown by cut, so as to make them easy to hold, without slipping through the fingers; they are also cupped on the point so as not to slip from the nail. Each.....\$0.10

KNURLED CENTER PUNCHES.



Tempered at both ends, knurled or milled shank so as not to slip through the fingers. Each.....\$0.15

KNURLED PRICK PUNCHES.



Made of best quality steel. Each.....\$0.12

SOLID PUNCHES.



	0	1	2	3	4	5	6	7	8
Each....	\$0.15	\$0.12	\$0.12	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10

TAPER SAW FILES.



Made of the Best Quality Steel. Every File Warranted.

Sizes.....	3 and 3½-in.	4-in.	4½-in.	5-in.	5½-in.	6-in.	7-in.	8-in.	9-in.	10-in.
Regular tapers, per doz....	\$0.63	\$0.66	\$0.72	\$0.78	\$0.90	\$1.02	\$1.39	\$1.62	\$2.00	\$2.45
Regular tapers, each.....	.06	.06	.07	.08	.09	.10	.13	.16	.20	.23
Slim tapers, per doz.....	.63	.66	.70	.75	.87	.93	1.15	1.35	1.62	1.93
Slim tapers, each.....	.06	.06	.07	.08	.09	.09	.12	.13	.16	.18

DOUBLE ENDER SAW FILES.

Per doz.....	6-in.	\$1.05	7-in.	\$1.05	8-in.	\$1.17	9-in.	\$1.32	10-in.	\$1.47
Each	6-in.	.12	7-in.	.12	8-in.	.13	9-in.	.15	10-in.	.16

AUGER BIT FILE.



Made specially for sharpening Auger Bits, being flat on one end, with one safe edge, and three square on the other end. Each.....\$0.25

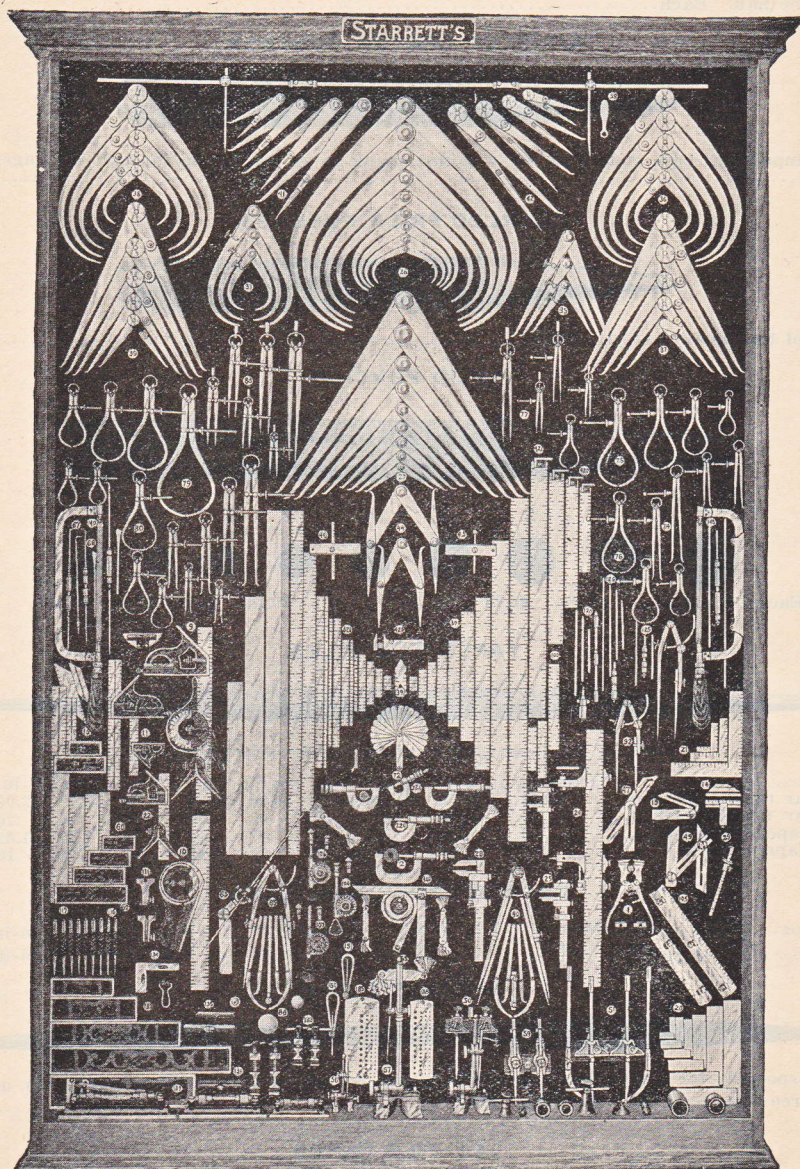
I-X-L FILE CARDS.



Wire File Card. Each.....\$0.15



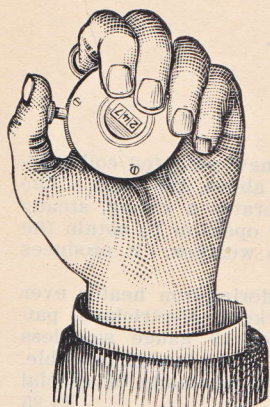
MECHANICAL TOOLS. THE L. S. STARRETT COMPANY.



SEND FOR SEPARATE CATALOG OF STARRETT'S TOOLS.

WE ALSO CARRY A FULL LINE OF CAP, SET AND MACHINE SCREWS.

TALLYING REGISTER.



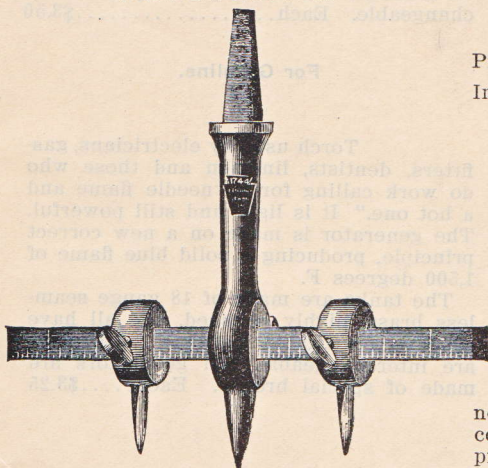
Instructions for using the "O" Register.

In using the Register, the better way is to place the middle finger of the left hand through the ring, holding the Register in position so as to bring the pusher directly under the thumb.

In order to insure registration, the pusher must be pushed down as far as it will go, then allowed to spring back to its place. In commencing to count, only the O's should appear thus, O O O. The Register will count to 999; the next registration or count causes the O O O's to appear, making 1,000. After taking off any particular count or registration (for example, 125), and it is desired to set the Register to O, press the pusher down the required number of times until the O appears at the right, and then change the other figures at the left by turning the thumb buttons on back of Register till the O's appear, always turning the thumb button of middle dial first.

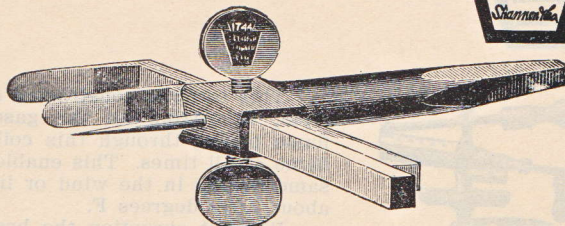
Price..... \$2.50 each.

WASHER CUTTER.



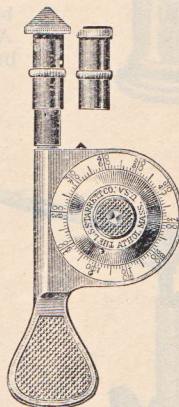
Price, each.....\$1.75

WASHER CUTTER.



Price, each.....\$0.75

HIGH SPEED INDICATOR.

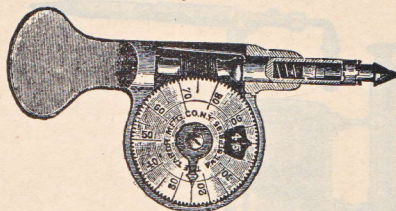


Price\$1.00 each

In Leatherette Case..... 1.50 each

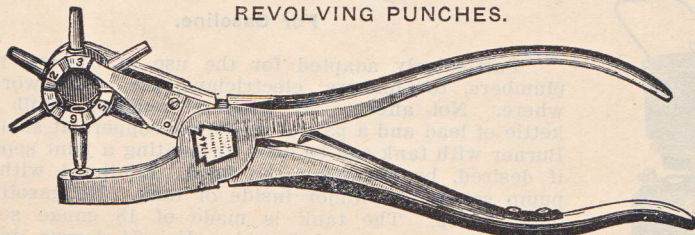
SPEED INDICATOR.

With Stop Motion.



This indicator has two dials, one beneath the other, allowing of a continuous count 5,000 revolutions. The stop motion prevents the moving of the dials until the proper moment. Price, each..... 75c

REVOLVING PUNCHES.



1-tube..... \$0.75

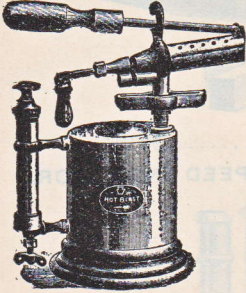
4-tube..... 1.25

6-tube..... 1.75





No. 21.



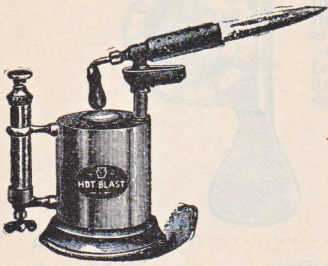
COMBINATION "HOT BLAST" BLOW TORCH.

For Gasoline.

This torch is constructed on a new patented coil principle, vaporizing all the gasoline above the tank. The flame passing through this coil generates a strong, steady flame at all times. This enables the operator to obtain the same results in the wind or in zero weather. It produces about 2,000 degrees F.

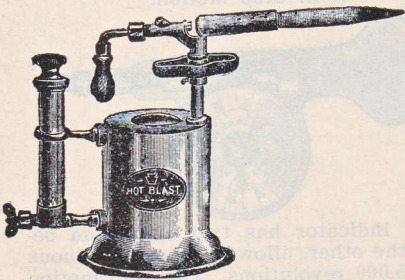
Without exception the best soldering-iron heater ever constructed. Used by conduit workers, electricians, pattern workers, etc. Tanks made of 18 gauge seamless brass. Concave steel bottom. All parts interchangeable. Always use 74 degree gasoline. Burner made of special bronze. Each.....\$4.25

For Gasoline.



"Hot Blast" Blow Torch for gasoline. For burning off paint, thawing pipes, heating joints, etc. Generating about 1,500 degree F. from a solid blue flame, which is easily regulated to suit the requirements of all. Tanks made of seamless brass. 18 gauge. All quart tanks have concave steel bottom, which serves as a funnel when filling. All parts interchangeable. Each.....\$3.50

For Gasoline.

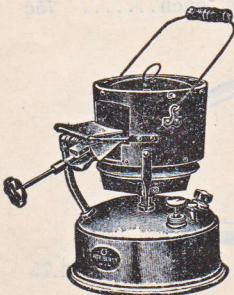


Torch used by electricians, gas-fitters, dentists, linemen and those who do work calling for a "needle flame and a hot one." It is light and still powerful. The generator is made on a new correct principle, producing a solid blue flame of 1,500 degrees F.

The tanks are made of 18 gauge seamless brass, highly polished, and all have concave corrugated bottoms. All parts are interchangeable. All generators are made of special bronze. Each.....\$3.25

"HOT BLAST" FURNACE.

For Gasoline.



Particularly adapted for the use of tanners, roofers, plumbers, tool-makers, electricians, etc. Will work anywhere. Not affected by wind or weather. Will heat a kettle of lead and a pair of soldering coppers at same time. Burner with tank can be used for heating a joint separately if desired, by removing the hood. Equipped with brass pump set in a cylinder inside of tank. No gasoline can enter pump. The tank is made of 18 gauge seamless brass, very strong and durable. Use 74 degree gasoline. Each \$5.50

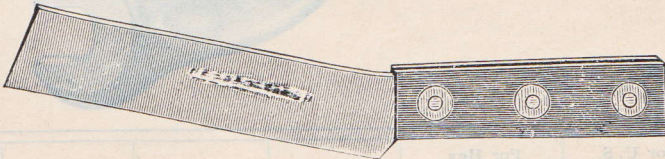
POCKET "HOT BLAST" TORCH.

For Alcohol.



For electricians, linemen, telephone and telegraph contractors, laboratory and office work. Made of brass. Nickel-plated. Light and convenient. Easily carried in pocket or tool bag. A metal cap prevents evaporation. Simple, durable and always ready to use. Each.....\$1.50

CHIPPING OR HACK KNIVES.



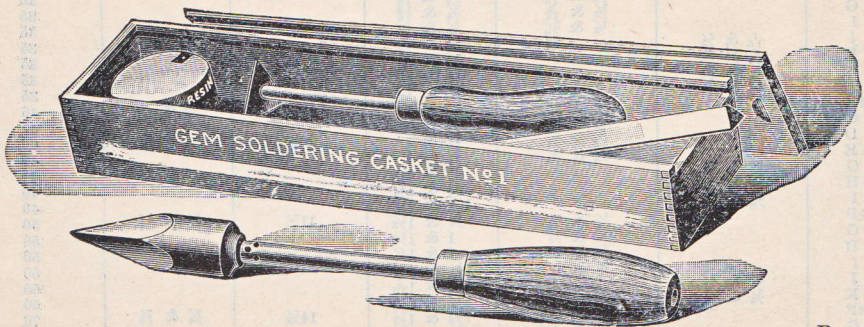
Heavy	Each	50c
Light	Each	40c

MELTING LADLES.



Nos.....	11	12	13	14	15	16	17	18
Each.....	15c	20c	25c	35c	40c	45c	60c	75c

SOLDERING SET.



Per set.

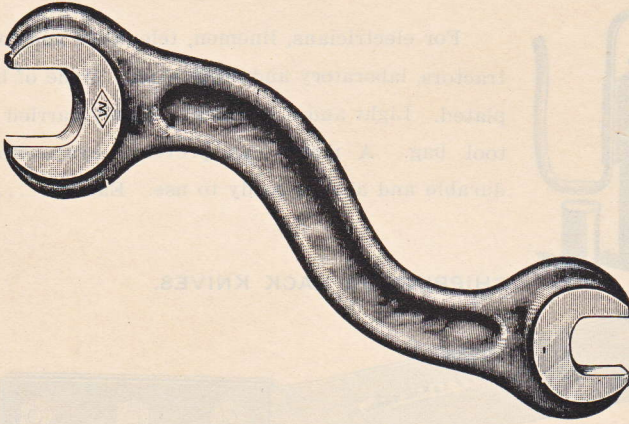
- No. 1. Soldering Set; is arranged so that it can be attached to gas burner to be heated\$0.75
 No. 2. Soldering Set; is not adapted for heating on gas burner and not quite highly finished as No. 1..... .35



S WRENCHES WITH CONCAVE HANDLE

22½° ANGLE, DOUBLE HEAD

FOR NUTS AND HEXAGON HEAD CAP-SCREWS

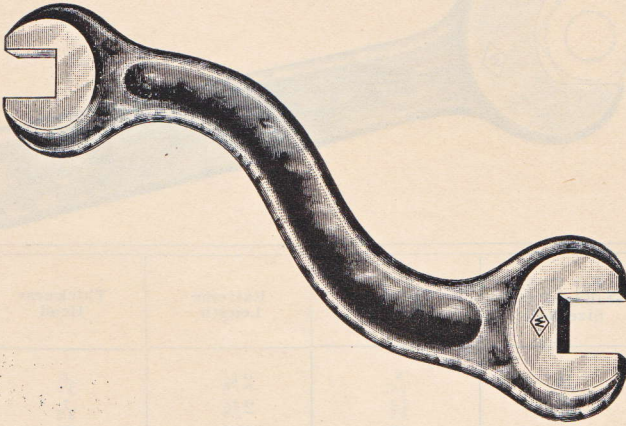


Number	For U. S. Standard Nuts; Size Bolts	For Hex. Head Cap-Screws; Diameter Screws	Openings Milled	Extreme Length	Thickness Heads	Price, Semifinished Each
235E	1/8 & 3/16		5/16 & 3/8	3 3/8	1/4 & 5/16	\$0 10
240B	3/8 & 1/4		1/2 & 5/8	4 3/8	3/8 & 1/2	13
D		1/8 & 1/4	1/2 & 5/8			13
E	3/8 & 1/4		1/2 & 5/8			13
F	1/2 & 5/8		1/2 & 5/8			13
G	1/2 & 5/8		1/2 & 5/8			13
246E	1/2 & 5/8		1/2 & 5/8	5 3/4	1/2 & 5/8	16
F		3/8 & 1/2	1/2 & 5/8			16
G		1/2 & 5/8	1/2 & 5/8			16
H		1/4 & 3/8	1/2 & 5/8			16
I	1/4 & 3/8		1/2 & 5/8			16
251C		1/2 & 5/8	1/2 & 5/8	6 1/2	3/8 & 1/2	20
D		1/2 & 5/8	1/2 & 5/8			20
251E	1/2 & 5/8		1/2 & 5/8	6 1/2	3/8 & 1/2	20
F	1/2 & 5/8		1/2 & 5/8			20
255C		1/2 & 5/8	1/2 & 5/8	7 1/4	1/2 & 5/8	25
E		3/8 & 1/2	1/2 & 5/8			25
H		3/8 & 1/2	1/2 & 5/8			25
J	3/8 & 1/2		1/2 & 5/8			25
K	3/8 & 1/2		1/2 & 5/8			25
263B		1/2 & 5/8	1/2 & 5/8	8	1/2 & 5/8	35
C		1/2 & 5/8	1/2 & 5/8			35
G		1/2 & 5/8	1/2 & 5/8			35
I		1/2 & 5/8	1/2 & 5/8			35
J	1/2 & 5/8		1/2 & 5/8			35
K	1/2 & 5/8		1/2 & 5/8			35
L	1/2 & 5/8		1/2 & 5/8			35
M	1/2 & 5/8		1/2 & 5/8			35
274B		1/2 & 5/8	1/2 & 5/8	10	1/2 & 5/8	40
C		3/8 & 1/2	1/2 & 5/8			40
D		3/8 & 1/2	1/2 & 5/8			40
E		3/8 & 1/2	1/2 & 5/8			40
G	1/2 & 5/8		1/2 & 5/8			40
H	1/2 & 5/8		1/2 & 5/8			40
I	1/2 & 5/8		1/2 & 5/8			40
281F		5/8 & 1 1/8	1 1/8 & 1 1/4	11 1/2	5/8 & 1 1/8	50
G		3/4 & 1	1 1/8 & 1 1/4			50
H		3/4 & 1	1 1/8 & 1 1/4			50
I		3/4 & 1	1 1/8 & 1 1/4			50
J	5/8 & 7/8		1 1/8 & 1 1/4			50
K	5/8 & 7/8		1 1/8 & 1 1/4			50
288F		7/8 & 1 1/8	1 1/8 & 1 1/4	14 1/2	7/8 & 1 1/8	70
G		1 & 1 1/8	1 1/8 & 1 1/4			70
H		1 & 1 1/8	1 1/8 & 1 1/4			70
I		1 & 1 1/8	1 1/8 & 1 1/4			70
J	3/4 & 1		1 1/8 & 1 1/4			70
K	3/4 & 1		1 1/8 & 1 1/4			70
L	3/4 & 1		1 1/8 & 1 1/4			70
M	3/4 & 1 1/8		1 1/8 & 1 1/4			70

S WRENCHES WITH CONCAVE HANDLE

22½° ANGLE, DOUBLE HEAD

FOR SET-SCREWS AND SQUARE HEAD CAP-SCREWS



Number	For Set-Screws Sizes	For Square Head Cap- Screws Diam. Screws	Openings Milled	Extreme Length	Thickness Heads	Price Semi-finished each
235A	¼ & ⅝		¼ & ⅝	3⅝	¼ & ⅝	\$0 10
B	¼ & ⅝		¼ & ⅝			10
C	¼ & ⅝		¼ & ⅝			10
D	⅝ & ⅝		⅝ & ⅝			10
240A	⅝ & ⅝		⅝ & ⅝	4⅞	⅝ & ⅝	14
C	⅝ & ⅝		⅝ & ⅝			14
246A	⅝ & ⅝	¼ & ⅝	⅝ & ⅝	5¼	⅝ & ⅝	16
B	⅝ & ⅝	¼ & ⅝	⅝ & ⅝			16
C	⅝ & ⅝	¼ & ⅝	⅝ & ⅝			16
D	⅝ & ⅝	¼ & ⅝	⅝ & ⅝			16
251A	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝	6½	⅝ & ⅝	20
B	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			20
255A	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝	7¼	⅝ & ⅝	25
B	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			25
D	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			25
F	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			25
G	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			25
I	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			25
263A	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝	8	⅝ & ⅝	32
D	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			32
E	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			32
F	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			32
H	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			32
274A	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝	10	⅝ & ⅝	40
F	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			40
281A	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝	11½	⅝ & ⅝	50
B	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			50
C	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			50
D	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			50
E	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			50
288A	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝	14½	⅝ & ⅝	70
B	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			70
C	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			70
D	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			70
E	⅝ & ⅝	⅝ & ⅝	⅝ & ⅝			70



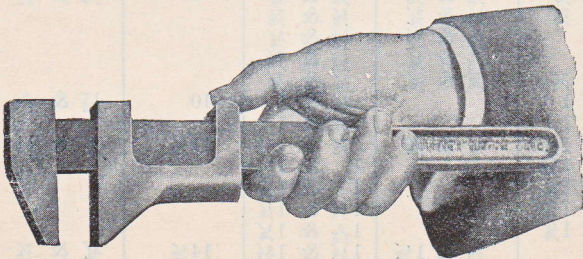
ENGINEERS' WRENCHES

15° ANGLE, SINGLE HEAD



Number	For U. S. Standard Nut Size Bolt	Opening Milled	Extreme Length	Thickness Head	Price, Semi- finished each
00	$\frac{1}{8}$	$\frac{5}{16}$	$2\frac{1}{2}$	$\frac{3}{16}$	\$0 10
0	$\frac{3}{16}$	$\frac{13}{32}$	$2\frac{7}{8}$	$\frac{7}{32}$	10
1	$\frac{1}{4}$	$\frac{1}{2}$	$3\frac{3}{4}$	$\frac{1}{4}$	10
2	$\frac{5}{16}$	$\frac{19}{32}$	$4\frac{3}{4}$	$\frac{9}{32}$	13
3	$\frac{3}{8}$	$\frac{11}{16}$	$5\frac{3}{8}$	$\frac{5}{16}$	15
4	$\frac{7}{16}$	$\frac{25}{32}$	$6\frac{1}{2}$	$\frac{11}{32}$	18
5	$\frac{1}{2}$	$\frac{7}{8}$	$7\frac{1}{2}$	$\frac{13}{32}$	20
6	$\frac{9}{16}$	$\frac{31}{32}$	$8\frac{3}{8}$	$\frac{7}{16}$	27
7	$\frac{5}{8}$	$1\frac{1}{16}$	$9\frac{1}{4}$	$\frac{1}{2}$	30
8	$\frac{3}{4}$	$1\frac{1}{4}$	$11\frac{1}{8}$	$\frac{9}{16}$	42
9	$\frac{7}{8}$	$1\frac{7}{16}$	13	$\frac{21}{32}$	53
10	1	$1\frac{5}{8}$	$14\frac{3}{4}$	$\frac{3}{4}$	70
11	$1\frac{1}{8}$	$1\frac{13}{16}$	$16\frac{1}{2}$	$\frac{23}{32}$	1 10
12	$1\frac{1}{4}$	2	$18\frac{1}{2}$	$\frac{29}{32}$	1 15
13	$1\frac{3}{8}$	$2\frac{3}{16}$	20	1	1 50
14	$1\frac{1}{2}$	$2\frac{3}{8}$	22	$1\frac{1}{16}$	1 85
15	$1\frac{5}{8}$	$2\frac{9}{16}$	24	$1\frac{1}{8}$	2 20
16	$1\frac{3}{4}$	$2\frac{3}{4}$	$25\frac{1}{2}$	$1\frac{7}{16}$	2 75
$16\frac{1}{2}$	$1\frac{7}{8}$	$2\frac{11}{16}$	$25\frac{1}{2}$	$1\frac{7}{8}$	2 75
17	2	$3\frac{1}{8}$	$29\frac{1}{2}$	$1\frac{3}{8}$	3 65
18	$2\frac{1}{4}$	$3\frac{1}{2}$	33	$1\frac{7}{8}$	5 00

WRIGHT WRENCH.

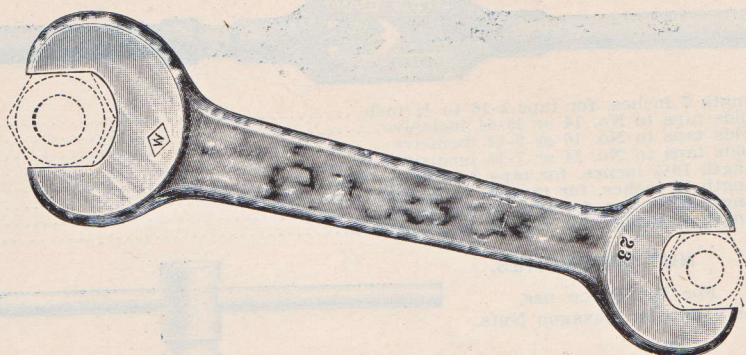


Size, inches	6	8	10	12
Each	\$0.80	\$0.90	\$1.00	\$1.25

Press the thumb to adjust instantly to any size nut.

ENGINEERS' WRENCHES

15° ANGLE, DOUBLE HEAD



Number	For U. S. Standard Nuts; Size Bolts	Openings Milled	Extreme Length	Thickness Heads	Price, Semi-finished each.
21	$\frac{1}{8}$ & $\frac{3}{16}$	$\frac{5}{16}$ & $\frac{13}{32}$	$3\frac{1}{4}$	$\frac{13}{64}$ & $\frac{7}{32}$	\$0 13
22	$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{5}{16}$ & $\frac{1}{2}$	4	$\frac{13}{64}$ & $\frac{1}{4}$	15
23	$\frac{3}{16}$ & $\frac{1}{4}$	$\frac{13}{32}$ & $\frac{1}{2}$	4	$\frac{7}{32}$ & $\frac{1}{4}$	16
24	$\frac{3}{16}$ & $\frac{5}{16}$	$\frac{13}{32}$ & $\frac{19}{32}$	$4\frac{7}{8}$	$\frac{7}{32}$ & $\frac{9}{32}$	18
25	$\frac{1}{4}$ & $\frac{5}{16}$	$\frac{1}{2}$ & $\frac{19}{32}$	$4\frac{7}{8}$	$\frac{1}{4}$ & $\frac{9}{32}$	20
26	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{1}{2}$ & $\frac{11}{8}$	$5\frac{7}{8}$	$\frac{1}{4}$ & $\frac{5}{16}$	22
27	$\frac{5}{16}$ & $\frac{3}{8}$	$\frac{19}{32}$ & $\frac{11}{8}$	$5\frac{7}{8}$	$\frac{9}{32}$ & $\frac{5}{16}$	23
28	$\frac{5}{16}$ & $\frac{7}{8}$	$\frac{19}{32}$ & $\frac{23}{32}$	$6\frac{7}{8}$	$\frac{9}{32}$ & $\frac{11}{32}$	25
29	$\frac{3}{8}$ & $\frac{7}{8}$	$\frac{11}{8}$ & $\frac{23}{32}$	$6\frac{7}{8}$	$\frac{5}{16}$ & $\frac{11}{32}$	27
30	$\frac{3}{8}$ & $\frac{1}{2}$	$\frac{11}{8}$ & $\frac{7}{8}$	$7\frac{3}{4}$	$\frac{5}{16}$ & $\frac{13}{32}$	30
31	$\frac{7}{16}$ & $\frac{1}{2}$	$\frac{23}{32}$ & $\frac{7}{8}$	$7\frac{3}{4}$	$\frac{11}{32}$ & $\frac{13}{32}$	32
32	$\frac{7}{16}$ & $\frac{9}{16}$	$\frac{23}{32}$ & $\frac{31}{32}$	$8\frac{3}{4}$	$\frac{11}{32}$ & $\frac{7}{16}$	36
33	$\frac{1}{2}$ & $\frac{9}{16}$	$\frac{7}{8}$ & $\frac{31}{32}$	$8\frac{3}{4}$	$\frac{13}{32}$ & $\frac{7}{16}$	40
34	$\frac{1}{2}$ & $\frac{3}{8}$	$\frac{7}{8}$ & $1\frac{1}{16}$	$9\frac{3}{4}$	$\frac{13}{32}$ & $\frac{1}{2}$	43
35	$\frac{9}{16}$ & $\frac{3}{8}$	$\frac{31}{32}$ & $1\frac{1}{16}$	$9\frac{3}{4}$	$\frac{7}{16}$ & $\frac{1}{2}$	46
36	$\frac{9}{16}$ & $\frac{3}{4}$	$\frac{31}{32}$ & $1\frac{1}{4}$	$11\frac{1}{2}$	$\frac{7}{16}$ & $\frac{9}{16}$	53
37	$\frac{5}{8}$ & $\frac{3}{4}$	$1\frac{1}{16}$ & $1\frac{1}{4}$	$11\frac{1}{2}$	$\frac{1}{2}$ & $\frac{9}{16}$	56
38	$\frac{5}{8}$ & $\frac{7}{8}$	$1\frac{1}{16}$ & $1\frac{7}{8}$	$13\frac{1}{2}$	$\frac{1}{2}$ & $\frac{31}{32}$	65
39	$\frac{3}{4}$ & $\frac{7}{8}$	$1\frac{1}{4}$ & $1\frac{7}{8}$	$13\frac{1}{2}$	$\frac{9}{16}$ & $\frac{21}{32}$	70
40	$\frac{3}{4}$ & 1	$1\frac{1}{4}$ & $1\frac{5}{8}$	$15\frac{1}{2}$	$\frac{9}{16}$ & $\frac{3}{4}$	80
41	$\frac{7}{8}$ & 1	$1\frac{7}{8}$ & $1\frac{5}{8}$	$15\frac{1}{2}$	$\frac{23}{32}$ & $\frac{3}{4}$	86
42	$\frac{7}{8}$ & $1\frac{1}{8}$	$1\frac{7}{8}$ & $1\frac{11}{8}$	17	$\frac{21}{32}$ & $\frac{27}{32}$	1 05
43	1 & $1\frac{1}{8}$	$1\frac{5}{8}$ & $1\frac{13}{8}$	17	$\frac{3}{4}$ & $\frac{27}{32}$	1 15
44	1 & $1\frac{1}{4}$	$1\frac{5}{8}$ & 2	19	$\frac{3}{4}$ & $\frac{23}{32}$	1 35
45	$1\frac{1}{8}$ & $1\frac{1}{4}$	$1\frac{13}{16}$ & 2	19	$\frac{27}{32}$ & $\frac{23}{32}$	1 45
46	$1\frac{1}{8}$ & $1\frac{3}{8}$	$1\frac{13}{16}$ & $2\frac{3}{16}$	21	$\frac{27}{32}$ & 1	1 75
47	$1\frac{1}{4}$ & $1\frac{3}{8}$	2 & $2\frac{3}{16}$	21	$\frac{27}{32}$ & 1	1 85
48	$1\frac{1}{4}$ & $1\frac{1}{2}$	2 & $2\frac{3}{8}$	23	$\frac{27}{32}$ & $1\frac{1}{16}$	2 20
49	$1\frac{3}{8}$ & $1\frac{1}{2}$	$2\frac{3}{16}$ & $2\frac{3}{8}$	23	1 & $1\frac{1}{16}$	2 40
50	$1\frac{3}{8}$ & $1\frac{5}{8}$	$2\frac{3}{16}$ & $2\frac{9}{16}$	25	1 & $1\frac{1}{8}$	2 80



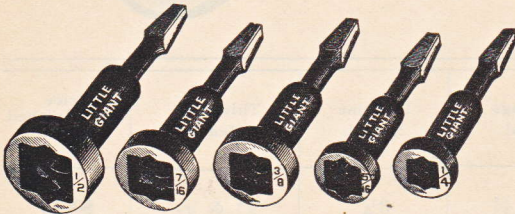
ADJUSTABLE TAP WRENCHES.



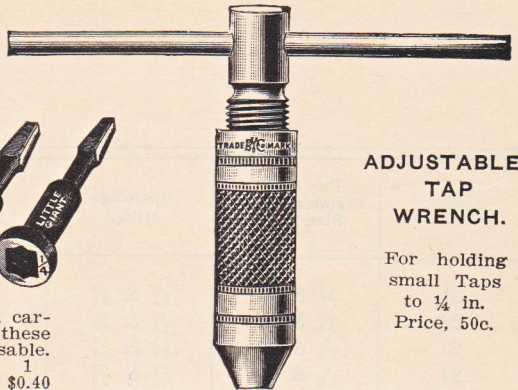
No.	Description	Each.
No. 0.	Length 7 inches, for taps 1-16 to $\frac{1}{4}$ inch.....	\$1.20
No. 1.	Holds taps to No. 14 or 13-64 inclusive.....	.35
No. 2.	Holds taps to No. 16 or 9-32 inclusive.....	.50
No. 3.	Holds taps to No. 24 or 7-16 inclusive.....	.70
No. 5.	Length 10 $\frac{1}{2}$ inches, for taps 3-16 to $\frac{1}{2}$ inch.....	1.60
No. 6.	Length 15 inches, for taps $\frac{1}{4}$ to $\frac{3}{4}$ inch.....	2.00
No. 7.	Length 20 inches, for taps $\frac{3}{8}$ to 1 inch.....	2.80
No. 8.	Length 42 inches, for taps $\frac{3}{4}$ to 1 $\frac{1}{2}$ inch.....	6.40

NUT WRENCHES.

For Bit Brace use.
For Square or Hexagon Nuts.



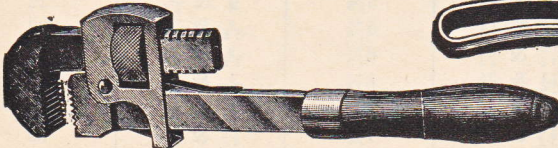
For putting on and taking off nuts in carriage work. For tapping nuts, etc., these wrenches have become almost indispensable.
Sizes... $\frac{3}{8}$ $\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ 1
Each... \$0.15 \$0.20 \$0.25 \$0.30 \$0.35 \$0.40



ADJUSTABLE TAP WRENCH.

For holding small Taps to $\frac{1}{4}$ in.
Price, 50c.

STILSON & TRIMO PIPE WRENCH.



Sizes...	6-in.	8-in.	10-in.	14-in.	18-in.	24-in.
Each...	\$0.65	\$0.75	\$0.85	\$1.25	\$1.55	\$2.30

ADJUSTABLE "S" PIPE WRENCH.



Sizes...	6-in.	8-in.	10-in.	12-in.	14-in.
Each...	\$0.75	\$1.00	\$1.25	\$1.60	\$2.00

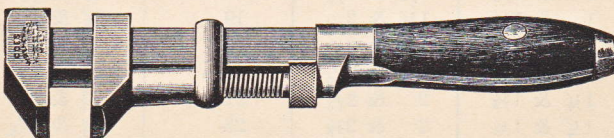
ADJUSTABLE "S" WRENCH.



Size, 6-inch,	opens $\frac{3}{4}$ -inch.....	\$0.50
Size, 8-inch,	opens 1-inch.....	.60
Size, 10-inch,	opens 1 $\frac{3}{8}$ -inch.....	.75
Size, 12-inch,	opens 1 $\frac{5}{8}$ -inch.....	1.00
Size, 14-inch,	opens 2-inch.....	1.40

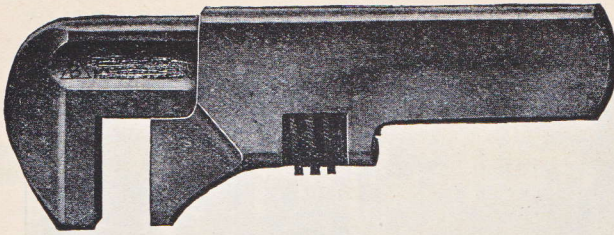
This Wrench is well made and finished; the slide of the movable jaw when opened does not project through one side, as is the case with other wrenches of this kind.

GENUINE COE'S WRENCHES.



Sizes.....	6-in.	8-in.	10-in.	12-in.	15-in.	18-in.	21-in.
Each.....	\$0.45	\$0.50	\$0.65	\$0.75	\$1.25	\$1.50	\$1.75

BICYCLE POCKET WRENCH.



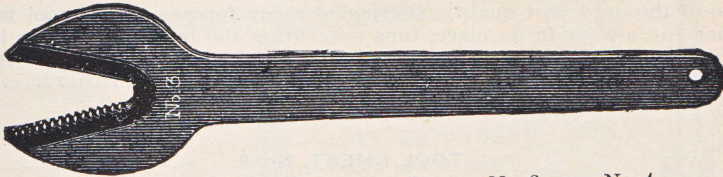
Full nickel-plated 50c each

AUTOMOBILE WRENCH.



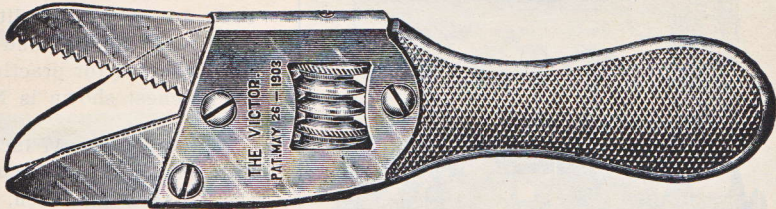
16 inches long, black finish..... 90c each

ALLIGATOR WRENCH.



	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5
Price	\$0.15	\$0.20	\$0.50	\$0.75	\$1.25	\$1.75 each

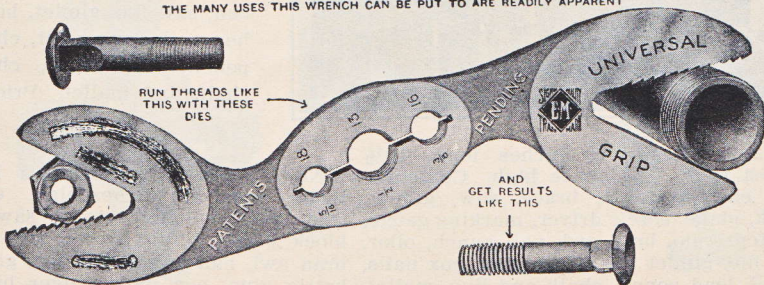
VICTOR ALLIGATOR WRENCH.



With adjustable jaws, full nickel-plated..... 75c each

NON-RUSTING COMBINATION WRENCH.

THE MANY USES THIS WRENCH CAN BE PUT TO ARE READILY APPARENT

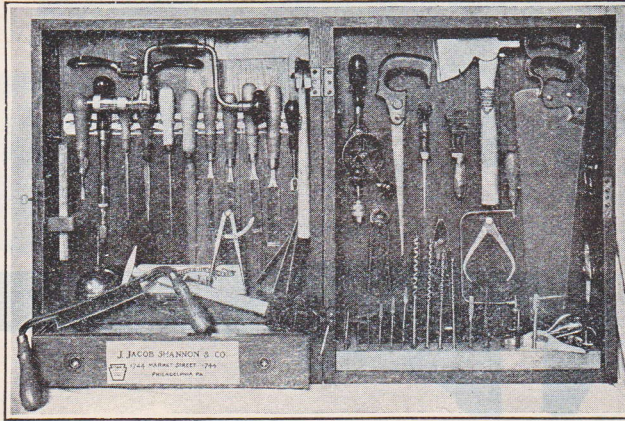


ESPECIALLY TOUGHENED CARBON STEEL AND WORKMANSHIP PROTECTED BY OUR GUARANTEE

Each wrench is put up in a separate envelope..... 50c each



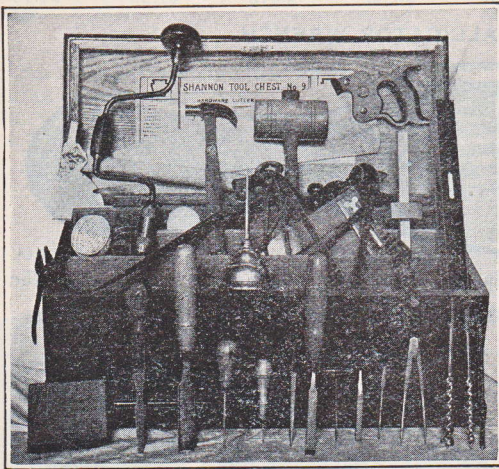
TOOL CABINET, No. 1.



This Tool Cabinet, which is shown, is one of the most useful articles to the household or to the amateur. It is made of well-seasoned oak, and neatly finished. The tools are of the very best quality, sharpened ready for use. Each tool is held by a tool-holder and always in its place, thus preventing the tools from being injured.

The cabinet is 26 inches high, 21 inches wide, closed; each side is 4 inches deep. Has a drawer which can be used for small tools, nails, etc. Price.....\$25.00

TOOL CHEST, No. 9.



Our tool chests are made of hardwood, polished. Each chest has a tray, lock and key. The tools are of good quality, sharpened ready for use, and are carefully selected for practical work. The chest shown is No. 9.

No. 3½ Chest. 17 inches long, 8 inches wide, 8 inches high. Contents: One each, hatchet, brace, saw, block plane, screw driver, marking gauge, two-foot rule, bradawl, nail punch, oil can, saw file, gimlet, bottle glue, box nails, auger bit, chisel, lead pencil, gimlet bit, chalk line, chalk and mallet. Price...\$3.50

No. 6 Chest. 20 inches long, 10½ inches wide, 8½ inches high. Contents: One each, hatchet, brace, saw, gimlet, block plane, screw driver, marking gauge, two-foot rule, bradawl, nail punch, oiler, saw file, gimlet bit, bottle glue, box nails, chisel, lead pencil, chalk and line, mallet, pair dividers, pocket level, gouge, try square, scratch awl, pair pincers, claw hammer, two auger bits. Each.....\$6.00

No. 4½ Chest. 18 inches long, 9½ inches wide, 7½ inches high. Contents: One each, hatchet, brace, saw, gimlet, block plane, screw driver, two-foot rule, bradawl, nail punch, oil can, gimlet, bit, bottle glue, box nails, auger bit, chisel, lead pencil, mallet, pair dividers, pocket level, marking gauge, chalk and line. Price\$4.50

TOOL CHESTS.



TOOL SETS.

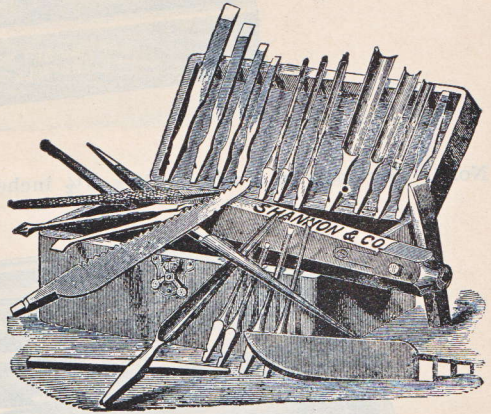
No. 9 Chest, which is shown, 26 inches long, 11½ inches wide, 11 inches high. Contents: one each, hatchet, brace, saw, block plane, screw driver, marking gauge, two-foot rule, gimlet, brad awl, nail punch, oiler, saw file, level, bottle glue, box nails, chisel, lead pencil, chalk and line, mallet, pair dividers, gouge, try square, scratch awl, wrench, pair pincers, claw hammer, compass saw, pair flat-nose pliers, two auger bits. Price.....\$9.00

No. 12 Chest. 30 inches long, 14½ inches wide, 12 inches high. Contents: one each, hatchet, brace, saw, block plane, screw driver, marking gauge, two-foot rule, brad awl, nail punch, oiler, saw file, gimlet, gimlet bit, bottle glue, box nails, lead pencil, chalk and line, mallet, pair dividers, level, wrench, try square, scratch awl, compass saw, pair flat-nose pliers, oil stone, screw driver bit, spoke shave, jack plane, flat file, hand screw, three auger bits, two chisels, two gouges. Price\$12.00

No. 15 Chest. 32 inches long, 15½ inches wide, 16 inches high. Contents: one each, hatchet, brace, saw, jack plane, block plane, screw driver, marking gauge, two-foot rule, brad awl, nail punch, oiler, saw file, gimlet, gimlet bit, bottle glue, mallet, box nails, lead pencil, pair wing dividers, level, try square, scratch awl, wrench, pair pincers, claw hammer, compass, saw, pair flat-nose pliers, screw driver bit, oil stone, spoke shave, flat file, glue pot, combination tool handle, back saw, hand screw, cold chisel, plumb bob, three auger bits, two chisels, two gouges, assortment of screws. Price.....\$15.00

No. 7 Handy Tool Set,

Extra Quality.



This set consists of twenty-seven tools; hand forged; all fitting one handle, packed in a walnut box.

Set, \$4.50.

TOOL CHESTS, EMPTY.

Each

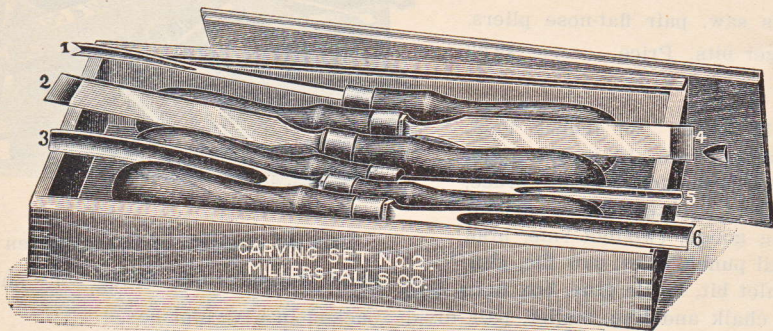
- | | | |
|---------|---|--------|
| No. 3½. | 17 inches long, 8 inches wide, 8 inches high.... | \$1.75 |
| No. 4½. | 18 inches long, 9½ inches wide, 7½ inches high.... | 2.50 |
| No. 6. | 20 inches long, 10½ inches wide, 8½ inches high.. | 3.00 |
| No. 9. | 26 inches long, 11½ inches wide, 11 inches high... | 4.50 |
| No. 12. | 30 inches long, 14½ inches wide, 12 inches high.... | 5.50 |
| No. 15. | 32 inches long, 15½ inches wide, 16 inches high.... | 6.75 |



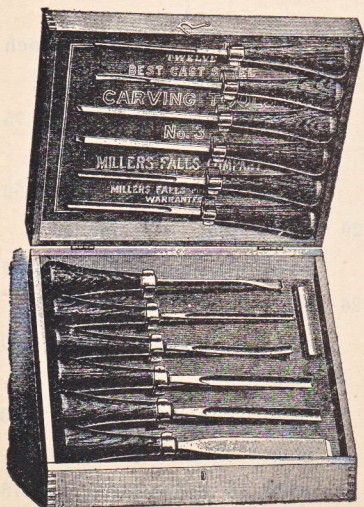
CARVING TOOLS.



No. 1. Six tools in a wooden box, $5\frac{1}{2}$ inches long.....\$0.85



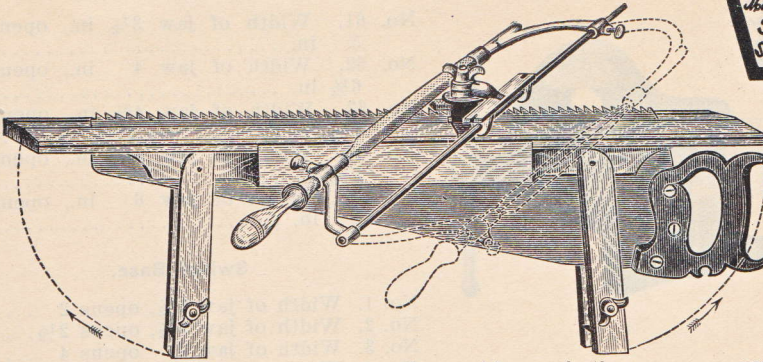
No. 2. Six tools in a wooden box, $8\frac{1}{2}$ inches long.....\$1.35



No. 3. Set of 13 tools (12 carving and 1 matting) gotten up for use in Manual Training Schools, and by Amateurs generally. The blades are made from the best steel. They are carefully tempered and finished, and are sent out sharpened for use. The handles are made from Cocobola wood, and of the most approved shapes. The cases, $9\frac{3}{4} \times 8\frac{1}{4}$ inches in size, are nicely finished, and compare favorably with the tools. A clamp is provided to hold each tool in the case.

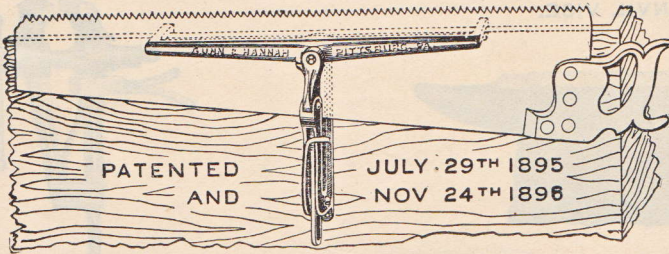
Price\$4.50 per set

**PATENT COMBINATION SAW JOINTER,
FILING-GUIDE AND CLAMP.**

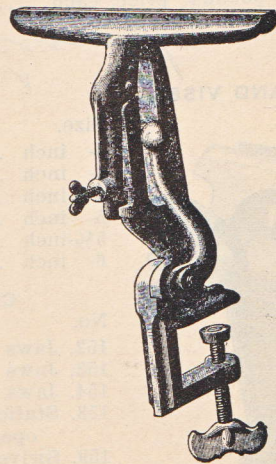
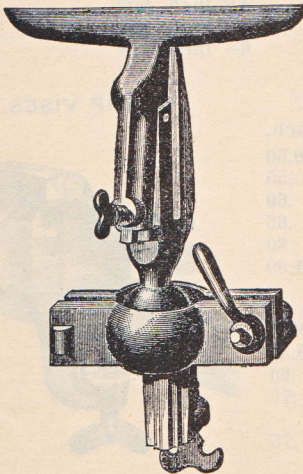


When filing a rip, band or meat saw, set the machine perfectly square, as per indicator marks, and file every tooth, being careful to have the carrier-slide in the direction of the hook of the teeth. To get the desired hook, loosen the thumb-screw at handle and turn the file. To joint a saw, insert a file or a piece of a file, in the lugs, prepared under the graduation, and slide from end to end. Each.....\$1.75

FOLDING SAW CLAMP.

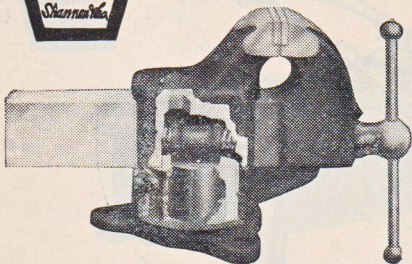


Folding Saw Clamp. Each.....\$1.00



SAW VISES.

- Each.
- No. 10. Japanned, 9½-inch jaw, with screw clamp for fastening to bench, screw and lever adjustment for holding the vise at any angle.....\$0.65
- No. 20. Japanned, 9½-inch jaw, with clamp for fastening to bench, ball and socket adjustment for holding the vise at any angle..... 1.00



VICES.

Stationary Bottom.

Each

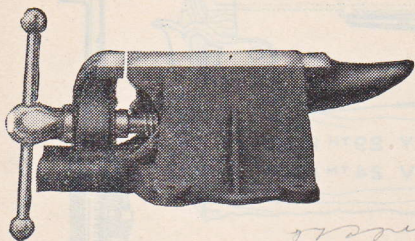
No. 61.	Width of jaw 3½ in., opens 5 in.	\$3.75
No. 62.	Width of jaw 4 in., opens 6½ in.	4.75
No. 63.	Width of jaw 4⅝ in., opens 7½ in.	5.70
No. 64.	Width of jaw 5¼ in., opens 8½ in.	8.75
No. 65.	Width of jaw 6 in., opens 11 in.	14.25

Swivel Base.

Each

No. 1.	Width of jaw 1½, opens 2	\$3.75
No. 2.	Width of jaw 2½, opens 2½	4.75
No. 3.	Width of jaw 3, opens 4	5.70
No. 4.	Width of jaw 3½, opens 5	8.75
No. 5.	Width of jaw 4, opens 6	14.25

ANVIL VISE.

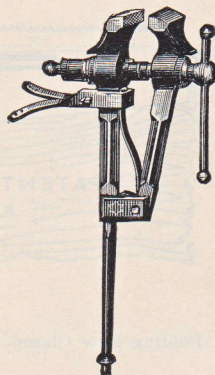


Each

Anvil and vise combined, with jaws for holding pipe. This vise is intended for light work.

Size 3-in. jaw, opens 5 inches, weight 26 pounds; price, each..... \$2.00

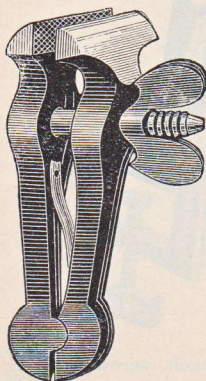
LEG VISE.



Each

4¼-inch jaw	\$5.75
4½-inch jaw	6.50
5-inch jaw	7.50
6-inch jaw	11.00

HAND VISES.



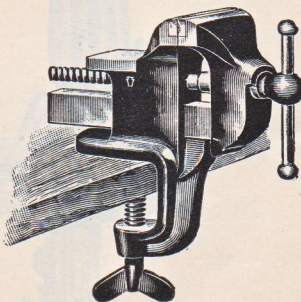
Forged Tool Steel.

Size.	Each.
3-inch	\$0.50
4-inch .....	.55
4½-inch .....	.60
5-inch .....	.65
5½-inch .....	.80
6-inch	1.00

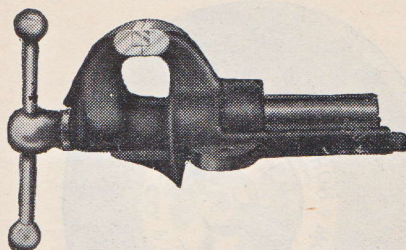
CLAMP VISES.

No.	Each.
152. Jaws open 1½ in.	\$0.35
153. Jaws open 1¾ in. ....	.60
154. Jaws open 2 in. ....	.75
158. Stationary base, jaws open 2 in. ....	.75
159. Swivel base, jaws open 2 in.	1.00
161. Jaws open 2 in.	1.75
162. Jaws open 3½ in.	2.25
163. Jaws open 4 in.	3.60

CLAMP VISES.



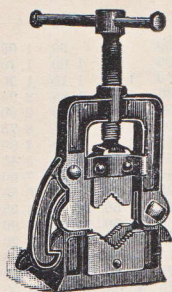
OVAL SLIDE VISE



	Each
Size 2½ in., opens 3¾ in., weight 8 lbs.....	\$1.50
Size 3 in., opens 4 in., weight 14 lbs.....	1.75
Size 3½ in., opens 4½ in., weight 22 lbs.....	2.75
Size 4 in., opens 4½ in., weight 30 lbs.....	4.00

PIPE VISES.

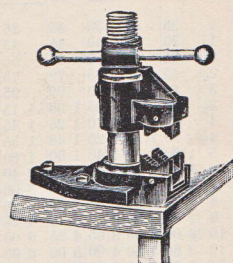
TWENTIETH CENTURY PIPE VISE.



Each.

No. 1 will hold from 0 to 2½-in. pipe. \$2.50

No. 2 will hold from ½ to 4½-in. pipe. 4.50



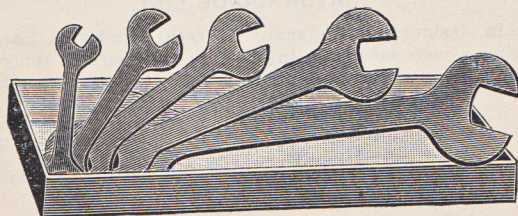
Can be used on bench or post in any position.

Holds ⅛ to 2-inch pipe.

Weight 8 pounds.

\$2.75 each.

WROUGHT-STEEL CASE-HARDENED AUTOMOBILE WRENCHES.



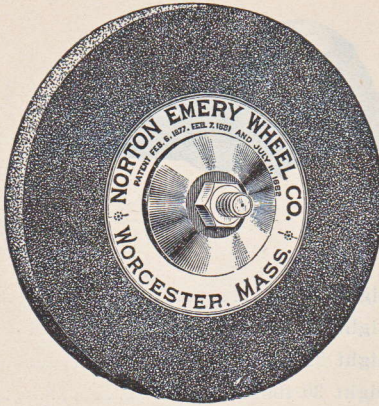
Five Wrenches in Set.

Set.

Polished and nickel-plated for bolts or cap screws ¼ and 5-16, ⅜ and 7-16, ½ and 19-32, ⅝ and ¾, ⅞ and 1.....	\$1.75
Semi-finish, same sizes as the above.....	1.00



PHILADELPHIA AGENCY.



NORTON GRINDING WHEELS

PRICE LIST OF REGULAR WHEELS.

THICKNESS OF WHEELS IN INCHES.																			
Diameter in inches.	1-4	3-8	1-2	5-8	3-4	7-8	1	1 1-4	1 1-2	1 3-4	2	2 1-4	2 1-2	2 3-4	3	3 1-4	3 1-2	4	
1	25	30	30	35	35	40	40	45	50	55	60	65	70	75	80	85	90	1 00	
1 1/2	30	35	40	45	45	50	50	55	60	65	70	75	80	85	90	95	1 00	1 10	
2	35	45	50	55	55	60	60	65	70	75	80	85	90	95	1 00	1 05	1 10	1 20	
2 1/2	40	55	65	70	75	80	85	95	1 05	1 15	1 25	1 35	1 45	1 55	1 65	1 75	1 85	2 05	
3	50	65	80	90	95	1 05	1 10	1 25	1 40	1 55	1 70	1 85	2 00	2 15	2 30	2 45	2 60	2 90	
3 1/2	60	80	95	1 05	1 15	1 25	1 35	1 55	1 75	1 95	2 15	2 35	2 55	2 75	2 95	3 15	3 35	3 75	
4	75	95	1 10	1 25	1 35	1 50	1 60	1 85	2 10	2 35	2 60	2 85	3 10	3 35	3 60	3 85	4 10	4 60	
4 1/2	90	1 10	1 25	1 40	1 55	1 70	1 85	2 15	2 45	2 75	3 05	3 35	3 65	3 95	4 25	4 55	4 85	5 45	
5	1 00	1 20	1 40	1 60	1 80	2 00	2 20	2 60	3 00	3 40	3 80	4 20	4 60	5 00	5 40	5 80	6 20	7 00	
6	1 40	1 60	1 75	2 10	2 40	2 75	3 05	3 70	4 35	5 00	5 65	6 30	6 95	7 60	8 25	8 90	9 55	10 85	
7	1 85	2 00	2 15	2 60	3 00	3 45	3 85	4 70	5 55	6 40	7 25	8 10	8 95	9 80	10 65	11 50	12 35	14 05	
8	2 10	2 35	2 60	3 10	3 60	4 10	4 60	5 60	6 60	7 60	8 60	9 60	10 60	11 60	12 60	13 60	14 60	16 60	
9	2 50	2 80	3 10	3 70	4 25	4 85	5 40	6 55	7 70	8 85	10 00	11 15	12 30	13 45	14 60	15 75	16 90	19 20	
10	3 00	3 35	3 65	4 35	5 00	5 70	6 35	7 70	9 05	10 40	11 75	13 10	14 45	15 80	17 15	18 50	19 85	22 55	
12	3 60	3 80	4 00	5 00	6 00	6 70	7 40	9 00	10 70	12 75	14 00	15 70	17 40	19 00	20 75	22 40	24 25	27 50	
14	4 05	5 15	6 25	7 35	8 45	9 55	10 65	12 85	15 05	17 25	19 45	21 65	23 85	26 05	28 25	30 45	32 65	37 05	
16	.....	.....	.....	.....	10 85	12 30	13 70	16 55	19 40	22 25	25 00	27 85	30 80	33 65	36 50	39 35	42 20	47 90	
18	.....	.....	.....	.....	13 25	15 15	17 00	20 75	24 50	28 25	32 00	35 75	39 50	43 25	47 00	50 75	54 50	62 00	
20	.....	.....	.....	.....	.....	.....	20 25	24 75	29 25	33 75	38 25	42 75	47 25	51 75	56 25	60 75	65 25	74 25	
22	.....	.....	.....	.....	.....	.....	25 00	31 00	37 00	43 00	49 00	55 00	61 00	67 00	73 00	79 00	85 00	97 00	
24	.....	.....	.....	.....	.....	.....	29 00	36 00	43 00	50 00	57 00	64 00	71 00	78 00	85 00	92 00	99 00	113 00	
26	.....	.....	.....	.....	.....	.....	.....	43 00	51 00	59 00	67 00	75 00	83 00	91 00	99 00	107 00	115 00	131 00	
30	.....	.....	.....	.....	.....	.....	.....	.....	61 00	72 00	83 00	94 00	105 00	116 00	127 00	138 00	149 00	171 90	
32	.....	.....	.....	.....	.....	.....	.....	.....	72 50	81 50	97 50	110 00	122 50	135 00	147 50	160 00	172 50	197 50	
34	.....	.....	.....	.....	.....	.....	.....	.....	83 00	91 00	112 00	126 00	140 00	154 00	168 00	182 00	196 00	224 00	
36	.....	.....	.....	.....	.....	.....	.....	.....	95 00	110 50	126 00	141 50	157 00	172 50	188 00	203 50	219 00	250 00	

All wheels thinner than $\frac{1}{4}$ inch are subject to same list price as wheels of that thickness.

All wheels less than 1 inch diameter are subject to same list price as wheels of that diameter.

NORTON GRADE LIST.

For convenience in designating the many different grades in hardness of which it is necessary that grinding wheels be made, in order to successfully apply to the great variety of uses now required of them, we have adopted the following list of comparative grade marks:

EXPLANATION.

E—Soft
F
G
H
J—Medium Soft
K

L
M—Medium
N
O
P
Q—Medium Hard
R

S
T
U—Hard
V
W
X
Y and Z—Extremely Hard

The intermediate letters between those designated as Soft, Medium Soft, etc., indicate so many degrees harder or softer; e. g., L is one grade or degree softer than Medium; O, two degrees harder than Medium, but not quite Medium Hard.

NORTON GRINDING WHEEL.



Table for Selection of Grades.

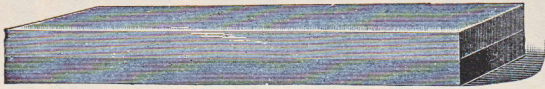
CLASS OF WORK.	No. of Emery or degree of coarseness usually furnished.	Grade Letters or degrees of hardness usually furnished.
Large Cast Iron and Steel Castings.....	12 to 20	Q to U
Small Cast Iron and Steel Castings.....	20 to 30	P to R
Large Malleable Iron Castings.....	14 to 20	O to U
Small Malleable Iron Castings.....	20 to 30	P to U
Chilled Iron Castings.....	20 to 30	P to U
Wrought Iron	12 to 30	P to U
Brass and Bronze Castings.....	20 to 36	N to Q
Rough Work in General.....	16 to 30	P to R
General Machine Shop use.....	24 to 46	O to P
Lathe and Planer Tools.....	24 to 46	L to P
Small Tools	24 to 46	N to P
Wood-Working Tools	36 to 100	J to N
Twist Drills (Hand Grinding).....	36 to 60	M to N
Twist Drills (Special Machines).....	36 to 60	K to M
Reamers, Taps, Milling Cutters, etc., Hand Grinding.....	46 to 100	M to P
Reamers, Taps, Milling Cutters, etc., Special Machines.....	46 to 80	J to M
Edging and Jointing Agricultural Implements.....	16 to 30	P to R
Grinding Plow Points.....	16 to 30	P to R
Surfacing Plow Bodies.....	16 to 24	P to R
Stove Mounting	20 to 36	P to Q
Finishing Edges of Stoves.....	30 to 46	P to Q
Drop Forgings	20 to 30	P to R
Gumming and Sharpening Saws.....	36 to 60	M to N
Planing Mill and Paper Cutting Knives.....	30 to 46	J to K
Car Wheel Grinding.....	20 to 30	L to P

Selection of Grades for Different Work.

The dealers and users often inquire what degree of coarseness and hardness shall be ordered for this or that work. It is more satisfactory in the majority of cases to leave this selection to the experienced manufacturer, after giving as complete detailed description as possible of the requirements, but for the benefit of the dealer who may not be thoroughly posted, and is obliged to supply the user direct from his own stock, and for the information of the user who prefers to make his own selection, we will attempt, upon the opposite page, to give an approximate idea of what is most commonly furnished for different operations in grinding different kinds of materials under ordinary conditions; but it must be borne in mind that no absolute rules can be given for this, and that the user must determine from his experience with his wheels on his own particular work as to what is best suited. It is not reasonable to expect that when a wheel has been furnished for a certain kind of work that it will give as satisfactory results on other kinds of work, so that too much ought not to be required of one grade of wheel; and where the amount of grinding will warrant it a variety of grades can be profitably employed, each carefully selected for its particular purpose. For instance: to grind tools without drawing the temper requires a soft or medium grade of wheel, which would not be suitable for coarse, rough work.



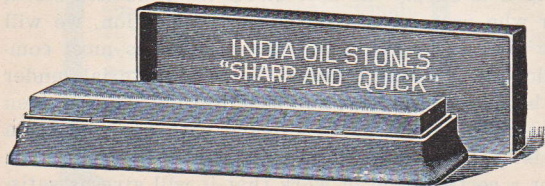
INDIA OIL STONE.—Combination Stone.



SHAPE	DIMENSIONS	PRICES EACH		SHAPE	DIMENSIONS	PRICES EACH	
		COARSE, MEDIUM OR FINE				COARSE, MEDIUM OR FINE	
0	8 x 2 x 1	\$1.00		19	Engravers' pencils, Fine one end, medi- um the other. }	\$0.40	
1	8 x 1 $\frac{3}{4}$ x 1 $\frac{1}{4}$	1.00		20	4 x 1 x $\frac{7}{16}$ / $\frac{3}{16}$	.30	
1 $\frac{1}{2}$	7 x 2 x 1	.75		*21	Special gouge slip 6 x 2 x 1 x $\frac{3}{8}$ x $\frac{3}{16}$	.75	
2	6 x 1 $\frac{5}{8}$ x $\frac{3}{4}$	.50		*21 $\frac{1}{2}$	Special gouge slip 9 x 3 x 1 $\frac{1}{4}$ x $\frac{3}{4}$ x $\frac{3}{8}$	1.00	
3	4 x 1 x $\frac{1}{2}$	.30		22	4 $\frac{1}{2}$ x 2 $\frac{1}{2}$ x $\frac{3}{8}$ / $\frac{5}{16}$	.50	
4	4 x $\frac{1}{2}$ x $\frac{1}{2}$	.30		22 $\frac{1}{2}$	6 x 2 $\frac{1}{4}$ x $\frac{3}{4}$ / $\frac{3}{8}$	.60	
5	4 x $\frac{3}{8}$ x $\frac{3}{8}$	.30		23	3 $\frac{1}{2}$ x $\frac{3}{4}$ x $\frac{3}{16}$ x $\frac{1}{8}$	.30	
6	4 x $\frac{1}{4}$ x $\frac{1}{4}$	.30		24	4 $\frac{1}{2}$ x 1 $\frac{1}{2}$ x $\frac{3}{8}$	.40	
7	4 x $\frac{1}{2}$ x $\frac{1}{2}$	.40		25	4 $\frac{1}{2}$ x 1 x $\frac{5}{16}$ Reamer Stone	.30	
8	4 x $\frac{3}{8}$ x $\frac{3}{8}$	.40		26	4 x $\frac{9}{16}$ x $\frac{3}{16}$	.50	
9	4 x $\frac{1}{4}$ x $\frac{1}{4}$	.40		27	Points 3 x $\frac{5}{16}$	.50	
10	4 x $\frac{1}{2}$	.45		28	Knife blade 4 x 1 x $\frac{1}{8}$	.50	
11	4 x $\frac{3}{8}$	.45		29	6 x 2 x 1	.60	
12	4 x $\frac{1}{4}$	.45		30	6 x $\frac{3}{8}$ x $\frac{3}{8}$	.45	
13	4 $\frac{1}{2}$ x 1 $\frac{3}{4}$ x $\frac{1}{2}$ / $\frac{3}{16}$	.35		31	6 x $\frac{1}{2}$ x $\frac{1}{2}$	.45	
14	4 $\frac{1}{2}$ x 1 $\frac{3}{4}$ x $\frac{3}{8}$ / $\frac{1}{8}$	.35		32	6 x $\frac{3}{8}$ x $\frac{5}{8}$	.45	
15	4 $\frac{1}{2}$ x 1 $\frac{3}{4}$ x $\frac{1}{4}$ / $\frac{1}{16}$	.35		33	6 x $\frac{3}{4}$ x $\frac{3}{4}$	.55	
16	8 x $\frac{5}{8}$ x $\frac{5}{8}$	.50		34	6 x 1 x 1	.55	
17	4 x 1 $\frac{1}{4}$ x $\frac{3}{8}$	.35		35	2x2x $\frac{3}{4}$ Axe Stones	.30	
18	4 x 1 $\frac{1}{4}$ x $\frac{3}{8}$	.35		36 } 37 } 38 } 39 }	1 set (4) carver's slips 2 $\frac{1}{4}$ x $\frac{7}{8}$ x $\frac{3}{16}$	1.00	
				40	2 x 1 x $\frac{1}{4}$	.30	

No. 53. Automobile Stone, . . \$.35 *Nos. 21 and 21 1/2 are furnished in *Special Fine* grade
With Leather Case,60

INDIA OIL STONES.—Mounted in Iron Boxes.



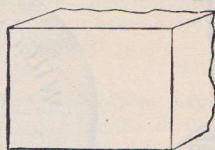
SHAPE	DIMENSIONS STONE	PRICES EACH INCLUDING BOX COARSE, MEDIUM OR FINE
0	8 x 2 x 1	\$1.35
1 1/2	7 x 2 x 1	1.10
2	6 x 1 5/8 x 3/4	.85
29	6 x 2 x 1	.95

Washita Oil Stones	.....lb.	\$0.30
Washita Slips	.....ea.	.15
Deerlick Oil Stones	.....lb.	.25
Deerlick Slips	.....ea.	.15
XX Razor Hones, good quality	.....ea.	1.00
XX Razor Hones, medium qualityea.	.65
Deerlick Razor Honesea.	.50

INDIA OIL STONES



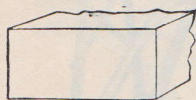
No. 0



No. 1



No. 1 1-2



No. 2



No. 3



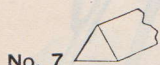
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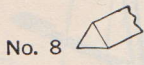
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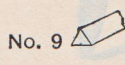
No. 6



No. 7



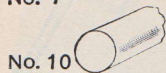
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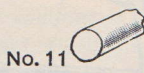
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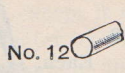
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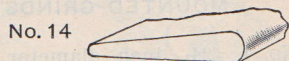
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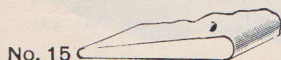
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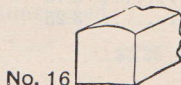
No. 12



No. 14



No. 15



No. 16



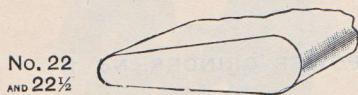
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No. 19

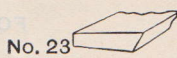


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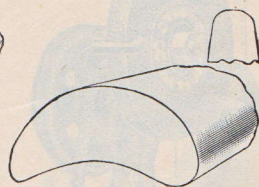


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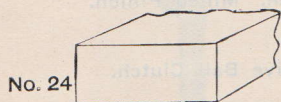
AND 22½



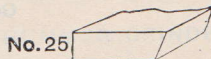
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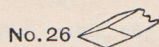
No. 21 AND 21½



No. 24



No. 25



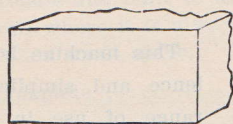
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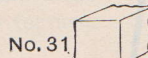
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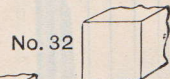
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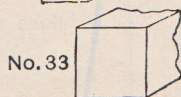
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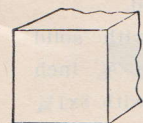
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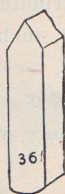
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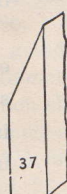
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No. 34



36



37



38

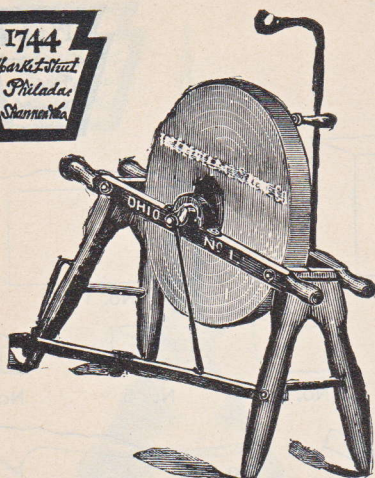


39

(CARVER'S SLIPS. Full Size).

END VIEWS.—Scale One-half.

For price, see page 83.



MOUNTED GRINDSTONES.

		Each.
No. 1.	24- inch diameter.....	\$4.25
No. 2.	22- inch diameter.....	3.75
No. 3.	19½-inch diameter.....	3.25



TUBULAR STEEL GRINDSTONE.

Each.

Ball-bearing\$4.50

FOOT POWER GRINDER, No. 1.

Gear Driven. Milled Pinion.

New Positive Ball Clutch.

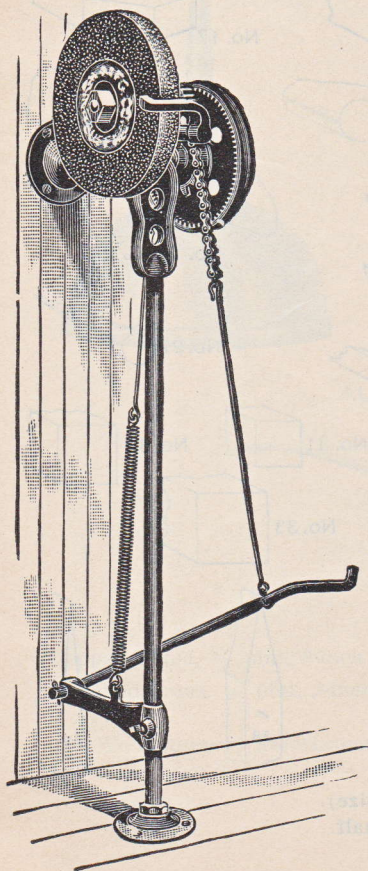
Cone Bearings.

This machine is designed for convenience and simplicity, and has a wide range of use in plumbing and repair shops, or where drill, tool, knife and other light grinding is required.

Height, 42 inches, fitted with solid emery wheel, 6x¾ inch, with ⅝ inch steel shaft. We also fit them with 8x1¼ inch solid emery wheel at slight advance in price.

Speed, 3,000 to 4,000.

Price, complete, with 6x¾ emery wheel, \$4.00.



GRINDERS.

No. 01.

Size of grinding wheel $3\frac{1}{2}$ inches by $\frac{3}{4}$ inch, 5-16 inch shaft. Machine is $10\frac{1}{2}$ inches high, driving wheel $4\frac{3}{4}$ inches in diameter, weight 4 pounds.

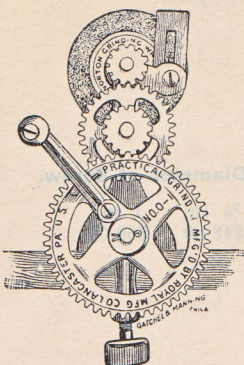
Price, complete\$1.75 each



No. 1-A.

This machine is large and heavier than the 01. Grinding wheel 4 inches in diameter, 1 inch face, $\frac{3}{8}$ inch shaft. Machine stands 12 inches high, main driving wheel $7\frac{1}{2}$ inches in diameter. Weight $6\frac{3}{4}$ lbs. It is a hand power and no foot power attachment with it.

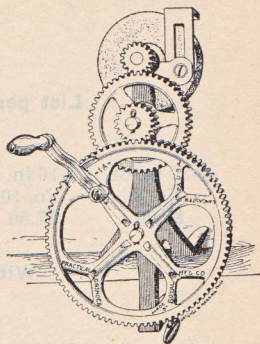
Price, complete\$2.50 each



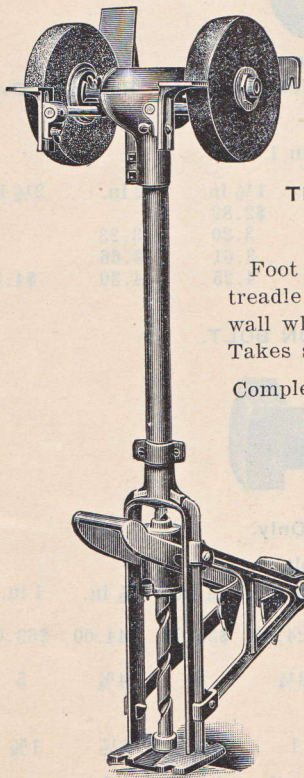
No. 1-B.

Machine is the same as the No. 1-A except it carries a larger grinding wheel, $4\frac{1}{2}$ inches in diameter by $1\frac{1}{4}$ inches face, 7-16 inch shaft, and has a heavier handle and crank, and is equipped with a heavier shaft and pinion for carrying the wheel. Weight $7\frac{3}{4}$ lbs. Not illustrated.

Price, complete\$3.25 each



THE HUMMER.



THE HUMMER GRINDER.

Ball Bearing.

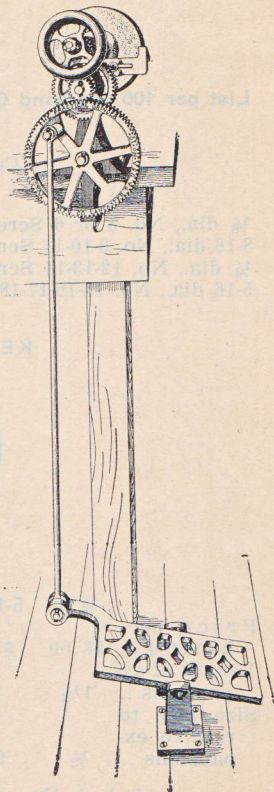
Foot power Grinder, using one foot treadle and built to stand against the wall where it is always ready for use. Takes small space.

Complete\$12.00 each

No. 10 Combination.

This is a larger machine than the No. 1-A or No. 1-B, carries a grinding wheel 6 inches in diameter by $\frac{3}{4}$ inch face, 7-16 inch shaft. Machine stands 16 inches high. Driving wheel $7\frac{1}{2}$ inches in diameter, weight 22 lbs. Sold as a foot power or a hand power, or a combined hand and foot power, as desired.

Complete\$5.00 each





DIAMOND EXPANSION BOLTS AND SHIELDS.



List per 100 for Shields Only. (Malleable.) Based on Diameter of Screw.

$\frac{1}{4}$ in.	5-16 in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	$\frac{5}{8}$ in.	$\frac{3}{4}$ in.	$\frac{7}{8}$ in.	1 in.
\$8.50	\$9.00	\$12.00	\$19.80	\$25.00	\$36.00	\$48.00	\$60.00



List per 100 for Shields Only (Composition) Two Part.

Size given is the Diameter of Screw.

5-32 in. or No. 8	3-16 in. or No. 10	7-32 in. or No. 12	$\frac{1}{4}$ in. or No. 14	5-16 in. or No. 18	$\frac{3}{8}$ in. or No. 24	$\frac{1}{2}$ in. or No. 30
\$7.00	\$7.50	\$8.00	\$8.50	\$9.00	\$12.00	\$19.80

With One Part Two Way Composition Shields.



One part Two-way Expansion

List per 100 Diamond One Part Expansion Bolts, Complete, with Flat, Round or Oval Head, Bright Iron Screws.

Composition Shields not longer than 1 inch.

	$\frac{3}{4}$ in.	1 in.	$1\frac{1}{2}$ in.	2 in.	$2\frac{1}{2}$ in.
$\frac{1}{8}$ dia., No. 5 or 6 Screw.....	\$2.78	\$2.79	\$2.82		
$\frac{1}{4}$ dia., No. 9-10-11 Screw.....	3.15	3.17	3.20	3.23	
$\frac{1}{2}$ dia., No. 12-13-14 Screw.....	3.54	3.57	3.61	3.66	
5-16 dia., No. 15-16-17-18 Screw.....		4.12	4.25	4.30	\$4.37

KEYSTONE MACHINE EXPANSION BOLT.



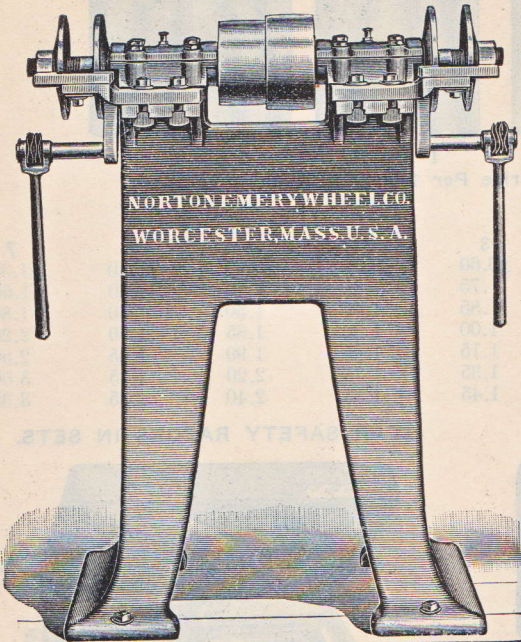
Price per 100 for Expansions Only.

	$\frac{1}{4}$ in.	5-16 in.	$\frac{3}{8}$ in.	7-16 in.	$\frac{1}{2}$ in.	$\frac{5}{8}$ in.	$\frac{3}{4}$ in.	$\frac{7}{8}$ in.	1 in.
Price per hundred ..	\$8.00	\$9.00	\$11.00	\$15.00	\$18.00	\$24.00	\$35.00	\$44.00	\$63.00
Length of expansions ..	$1\frac{1}{2}$	$1\frac{7}{8}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$3\frac{1}{4}$	4	$4\frac{3}{4}$	5
Size hole to receive expansions ..	$\frac{1}{2}$	9-16	11-16	13-16	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{5}{8}$

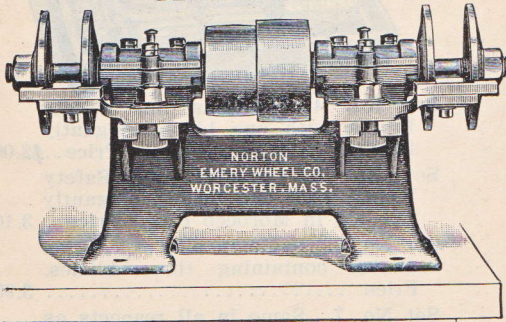
$\frac{1}{2}$ -inch Expansions tapped 13 threads, unless otherwise ordered.

GRINDING MACHINERY.

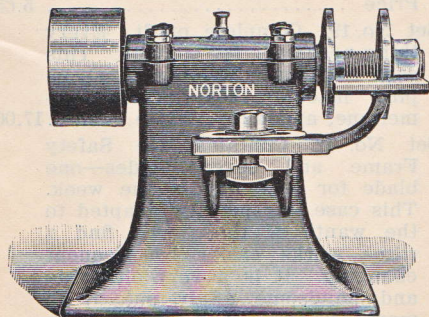
Floor Machine.



BENCH MACHINE.



NORTON BENCH SAW GUMMER.



The above prices are subject to discount.

PRICE LIST.

Floor Machines.

1¼" Spindle for wheels 14"	
dia. 2½" thick.....	\$55.00
Countershaft.....	19.00
1½" Spindle for wheels 16"	
dia. 3" thick.....	70.00
Countershaft.....	23.00
1¾" Spindle for wheels 20"	
dia. 3½" thick.....	85.00
Countershaft.....	27.00
2" Spindle for wheels 24" dia.	
4" thick	100.00
Countershaft.....	30.00
2¼" Spindle for wheels 30"	
dia. 4" thick.....	112.50
Countershaft.....	30.00
3" Spindle for wheels 36" dia.	
5" thick	290.00
Countershaft.....	60.00

BENCH MACHINES.

½" Spindle for Wheels 6"	
dia. 1" thick.....	\$6.00
(without rests)	
½" Spindle for wheels 6"	
dia. 1" thick.....	7.50
(with rests)	
Countershafts.....	10.00
⅝" Spindle for wheels 8" dia.	
1" thick	10.00
Countershaft.....	10.00
¾" Spindle for wheels 10"	
dia. 1½" thick.....	13.50
Countershaft.....	13.50
1" Spindle for wheels 12" dia.	
2" thick	25.00
Countershaft.....	13.50
1¼" Spindle for wheels 14"	
dia. 2½" thick.....	40.00
Countershaft.....	19.00

Specifications.

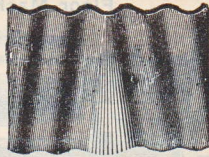
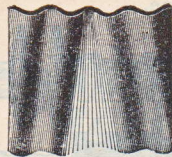
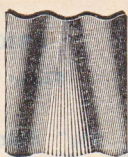
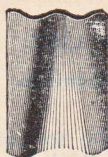
Weight, about 40 lbs.	
Diameter of spindle between flanges, 1 inch.	
Length of bearing, 6 inches.	
Size of pulley, 4½x2½ inches.	
Height from bench to centre of spindle, 8½ inches.	
Designed for wheels up to 12-inch diameter, 1½-inch thick.	
Bench space occupied, 9½x11¾ inches.	
Price.....	\$7.50
Countershaft.....	10.00

All of the above machines can be furnished with single or cone pulleys, with the exception of the ½" and ⅝" Bench Machines and the 3" Floor Machines.





KEYSTONE METAL JOINT FASTENERS.



No. of
Corrugations.... 2

3

4

5

Price Per 1000.

Inches

in

Depth

	2	3	4	5	6	7
1/4.....	\$0.45	\$0.60	\$0.75	\$0.90	\$1.10	\$1.30
3/8.....	.60	.75	.95	1.20	1.40	1.60
1/2.....	.60	.85	1.05	1.30	1.50	1.80
5/8.....	.75	1.00	1.30	1.85	1.70	2.20
3/4.....	.80	1.15	1.45	1.90	1.85	2.50
7/8.....	.90	1.35	1.75	2.20	2.25	3.00
1.....	1.00	1.45	1.85	2.40	2.85	3.35

Gillette

NO
HONING
NO
STROPPING

Safety Razor

TWELVE BLADES.
TWENTY-FOUR
SHARP EDGES.

20 to 40 Shaves
From Each Blade.

ALWAYS
READY
TO
USE.



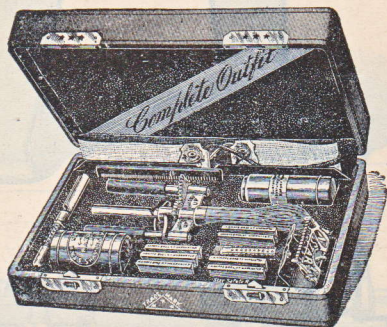
It is a De-
light to
Simply Lather
and Shave.

With each set are 12
wafer blades (24 sharp
edges) as thin as paper, as
hard as flint, as tough and
flexible as whalebone.

Although the GILLETTE
RAZOR is a new invention, it
has already attained enormous
popularity and is solving the
shaving problem for every man.
It has taken shavers by storm
everywhere. You would be
surprised if you knew how
many of your acquaintances
are using it.

Heavily silver-plated set, \$5.00
Extra blades, per dozen, \$1.00

STAR SAFETY RAZORS IN SETS.



Set No. 4. Contains one Safety
Frame with one blade, elegantly
finished in Morocco case. Price...\$2.00

Set No. 5. Contains one Safety
Frame with two blades, elegantly
finished in Morocco case. Price... 3.10

Set No. 6. Same in all respects as
above, containing three blades.
Price 3.95

Set No. 7. Same in all respects as
above, containing four blades.
Price 4.80

Set No. 8. Same in all respects as
above, containing five blades.
Price 5.65

Set No. 19. Complete outfit. Every
thing necessary for shaving. This
case contains seven blades, stop-
ping machine, soap, comb, cos-
metique, and strop. Price.....17.00

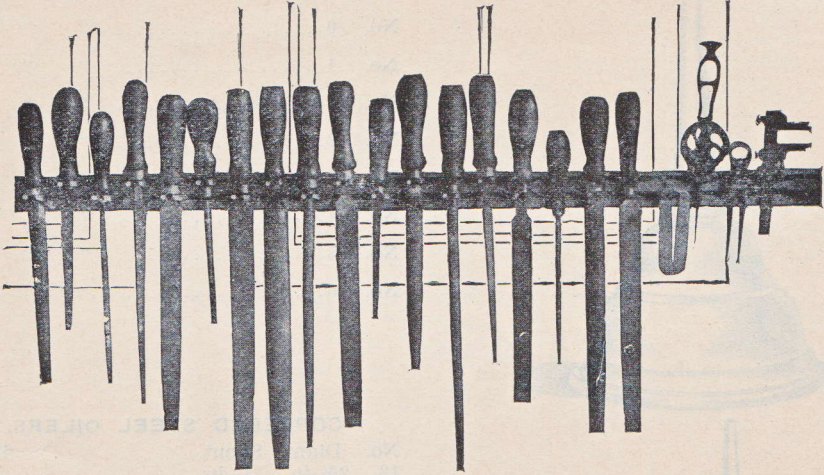
Set No. 12. Contains one Safety
Frame and seven blades—one
blade for each day in the week.
This case is especially adapted to
the wants of those who find a
razor works easier by frequent
changing. It is a very elaborate
and handsome affair, put up in
morocco and lined with satin.
Price 8.50

Star Safety Razors, ready for use,
put up in a tin box.....each 1.50

Star Safety Blades.....each \$0.85

Star Stropping Machines,
\$1.50 and \$2.00 each.

TOOL HOLDERS.



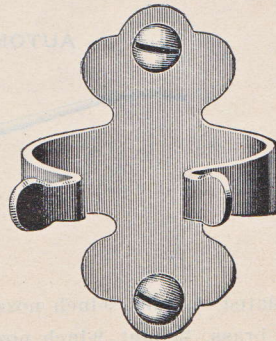
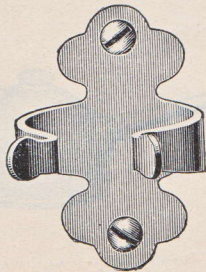
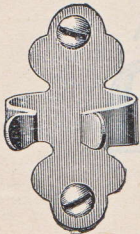
WROUGHT STEEL TOOL HOLDERS.

Small.	Medium.	Large.	
$\frac{3}{4}$ -inch.	1-inch.	$1\frac{1}{4}$ -inch.	
\$2.50	\$3.00	\$3.50	Dozen Lengths.
.25	.30	.35	Each Length.

Small.

Medium.

Large.



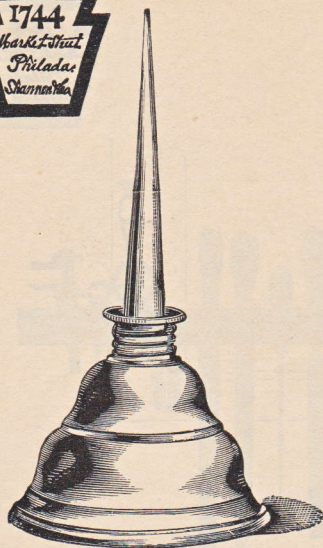
"CARPENTERS'" APRONS.

Brown or White.

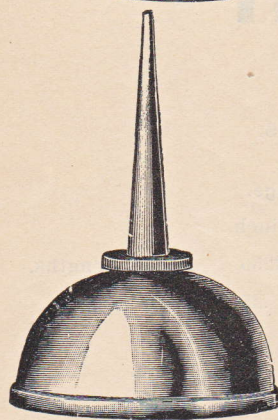
Each..... 25c



PATENT ZINC OILERS.



No. 00.....	Price each	\$0.05
No. 0.....	" "	.06
No. 1.....	" "	.08
No. 1½.....	" "	.10
No. 2.....	" "	.12
No. 3.....	" "	.15
No. 4.....	" "	.17
No. 5.....	" "	.20
No. 6.....	" "	.25



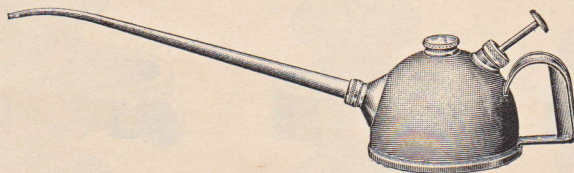
COPPERED STEEL OILERS.

No.	Diam.	Spout.	Each.
12.	2¾-in.,	2½-in.	\$0.20
13.	3 "	3⅛ "	.25
14.	3⅝ "	9 "	.30
14A.	3¾ "	3 "	.35
14B.	3¾ "	9 "	.35
15.	4¼ "	3 "	.40
15A.	4¼ "	5 "	.70
16.	4¼ "	9 "	.45

BRASS OILERS.

No.	Diam..	Spout.	Each
120.	2¾-in.,	2½-in.	\$0.35
130.	3⅝ "	3 "	.40
140.	3⅝ "	9 "	.45
150.	4¼ "	3 "	.60
160.	4¼ "	9 "	.70

AUTOMOBILE PUMP OILERS.



Each,

Copper-plated, ½ pint, 9-inch nozzle.....	\$1.00
Polished brass, ½ pint, 9-inch nozzle.....	1.25

We also carry assortment of oilers which are not illustrated.

I744

Market Street

Philada.

Shannon & Co.